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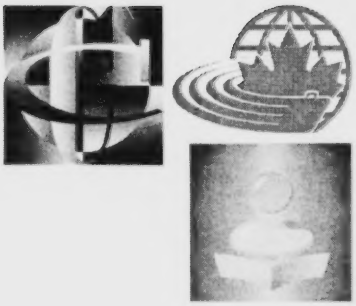
Research Paper

Culture, Tourism and the Centre for Education Statistics

Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005



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Research papers

Graduating in Canada: Profile, Labour Market Outcomes and Student Debt of the Class of 2005

Justin Bayard, Human Resources and Skills Development Canada
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Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued cooperation and goodwill.

Acronyms

CEGEP	Collège d'enseignement général et professionnel
NGS	National Graduates Survey
OECD	Organization for Economic Cooperation and Development

Table of contents

Acknowledgements		4
Acronyms		5
Introduction		7
Section 1:	Profile of graduates	9
Section 2:	Educational and labour market activities after graduation	14
	2.1 Further education	14
	2.2 Graduates in the workforce	16
Section 3:	Student loans and debts	29
	3.1 Overview of student debt	29
	3.2 Government-financed student debt	37
	3.3 Profile of the size of student debt at graduation	41
Section 4:	Other types of educational programs	45
	4.1 Co-operative education	45
	4.2 International studies	47
Conclusion		51
Appendix		53
References		74
Endnotes		75
Cumulative index		76

Introduction

In an increasingly knowledge-driven and global economy, a highly skilled well educated workforce is a key driver of economic competitiveness as well as social and economic development. Countries have supported all types of postsecondary education in order to improve the knowledge and skills of the labour force, increase productivity and support world class research. For individuals, a postsecondary qualification contributes to employability, access to continued learning and training and higher lifetime earnings in addition to other related social outcomes. Therefore, governments have emphasized investments in higher education.

Canada has a highly developed postsecondary education system and as a result almost half of young adults aged 25 to 34 years hold some type of postsecondary education credential, well above the OECD average of 33%[1]. However, the demands of the global economy require an optimal skills-job match, which requires more detailed information on the flow of graduates with specific knowledge and skills in addition to the type of postsecondary credential. This demands a greater understanding of the educational pathways of graduates, the investment in time related to their chosen field of study and the labour market outcomes related to each field of study following graduation. Such information is important for informed decisions regarding the expected return for investment in years of education in specific fields of study and estimates of the time required to retire any debt incurred during education. This information is also valuable to determine the distribution of skills in the labour force to respond to anticipated skills shortages.

This report describes the educational experiences, labour market outcomes and financing of higher education of recent graduates for Canadian postsecondary education institutions using data from the 2007 National Graduates Survey (Class of 2005). The first section describes the characteristics of graduates from college, bachelor, master and doctorate level programs. The second section focuses on experiences after graduation including pursuing further education and labour market activities. Section three presents information on the financing of postsecondary education, its relation to education level and labour market outcomes. The final section focuses on co-operative education and international studies and their relationship with labour market outcomes and student debt.

The National Graduates Survey (NGS)

The National Graduates Survey examines the labour market experiences of graduates from Canadian public universities, CEGEPs, community colleges and trade/vocational programs. The survey's primary objective is to obtain information on the labour market experiences of graduates entering the labour market, focusing on employment, occupations and the relationship between jobs and education. The NGS interviews graduates two and five years after graduation. To date, six graduating classes have been surveyed: 1982, 1986, 1990, 1995, 2000 and 2005.

This report presents the first results of the 2007 National Graduates Survey (Class of 2005). It looks at graduates who completed the requirements or graduated from a college or university bachelor, master or doctoral program in 2005. Data for graduates of trade/vocational programs are not presented in this report.

Section 1

Profile of graduates

In 2005, approximately 305,000[2] students graduated from Canada's public colleges and universities with 53% of graduates obtaining a bachelor degree, 34% a college certificate or diploma, and 13% a master or doctorate degree. Compared to 2000, the distribution of graduates by level of study remained relatively unchanged.[3]

Table 1.1

Profile of 2005 postsecondary graduates by level of study

		College	Bachelor	Master	Doctorate
Total number of graduates	**number**	**103,900**	**162,300**	**35,300**	**3,500**
Female	percent	58	63	56	46
Male	percent	42	37	44	54
Average age at time of graduation	years	26	26	32	35
Median age at time of graduation	years	23	24	29	33
Under age 25 at time of graduation	percent	61	62	14	x
Average duration of program if taken full-time	months	21	39	25	64
In secondary school 12 months prior to entering program					
All of Canada	percent	32	40	...	...
Quebec	percent	40	4	...	...
Rest of Canada	percent	30	53	...	...
Pursued further education after 2005 graduation	percent	31	42	30	8
Completed further education after 2005 graduation	percent	10	16	7	4

... not applicable

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Note: The "Bachelor" category includes university diplomas or certificates below the bachelor level, bachelor degrees and first profe ssional degrees, such as law or medicine.

The total number of college graduates is under-estimated; see endnote 2 for details.

Numbers of graduates are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

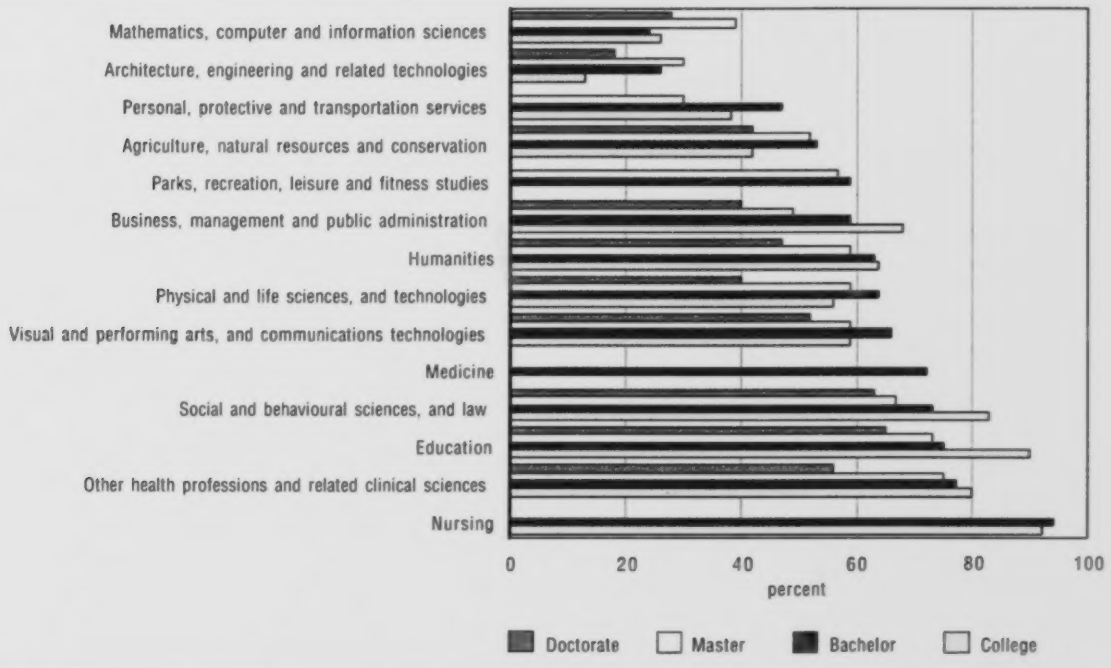
As shown in Table 1.1, females made up the majority of graduates at the college (58%), bachelor (63%) and master (56%) levels in 2005 while males made up the majority of doctorate graduates. Compared to 2000, the proportion of female graduates increased slightly across all levels of study except the master level. The proportion of females at the college, bachelor and doctorate levels increased from 57%, 61% and 43% respectively in 2000 whereas the proportion of female graduates at the master level decreased slightly from 58% in 2000.

Female graduates were more concentrated in the health-related fields while male graduates were more concentrated in Mathematics, computer and information sciences and Architecture, engineering and related technologies

While women made up the majority of graduates at the college and bachelor levels, the concentration of men and women graduates differed across field of study. As shown in Chart 1.1, female graduates made up the majority of the graduating class in the health-related fields such as Nursing; Other health professions; and Medicine. They also dominated in Education. In contrast, male graduates made up the majority of the graduating class in Mathematics, computer and information sciences; Architecture, engineering and related technologies; and Personal, protective and transportation services.

Differences in gender also existed by level of study within fields of study (Chart 1.1). For example, the proportion of females graduating from Education; Other health professions; Social and behavioural sciences, and law; Humanities; and Business, management and public administration decreased as level of study increased. For Mathematics, computer and information sciences and Architecture, engineering and related technologies a higher proportion of graduates at the master level were female relative to other levels of study within the same field. However, only in these two fields of study and in Personal, protective and transportation services did women represent less than half of the graduates at all levels of study.

Chart 1.1
Proportion of female graduates in selected fields of study, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

College graduates were typically older than bachelor graduates when they entered their program

The typical (median) age of college and bachelor graduates was relatively similar at 23 years and 24 years respectively. While the median age of college and bachelor graduates differed by only one year, there was nearly a two-fold difference in the length of each program. Full-time college programs, on average, took 21 months to complete, while full-time bachelor programs took 39 months. This indicates that college graduates, when they entered their program, were typically older than their peers who entered a bachelor program (see Table 1.1).

When the three groups of graduates from within the bachelor category are broken down, graduates of university diploma/certificate programs took 23 months to complete their studies, while bachelor degree graduates and graduates with their first professional degree took 40 months.

The majority of graduates did not pursue their program right after high school

The pathways that graduates follow through postsecondary education are varied. The traditional route of moving directly from secondary to postsecondary studies is not necessarily the norm. Approximately half the graduates did not enter their program directly from high school. Figures 1.2.1 and 1.2.2 show educational activity prior to entry into postsecondary studies at the college and bachelor levels. Results at the bachelor level are provided separately for Quebec graduates and graduates from the rest of Canada due to the unique education system in Quebec which requires that students complete a two-year college program at a CEGEP (Collège d'enseignement général et professionnel) as a prerequisite for university.

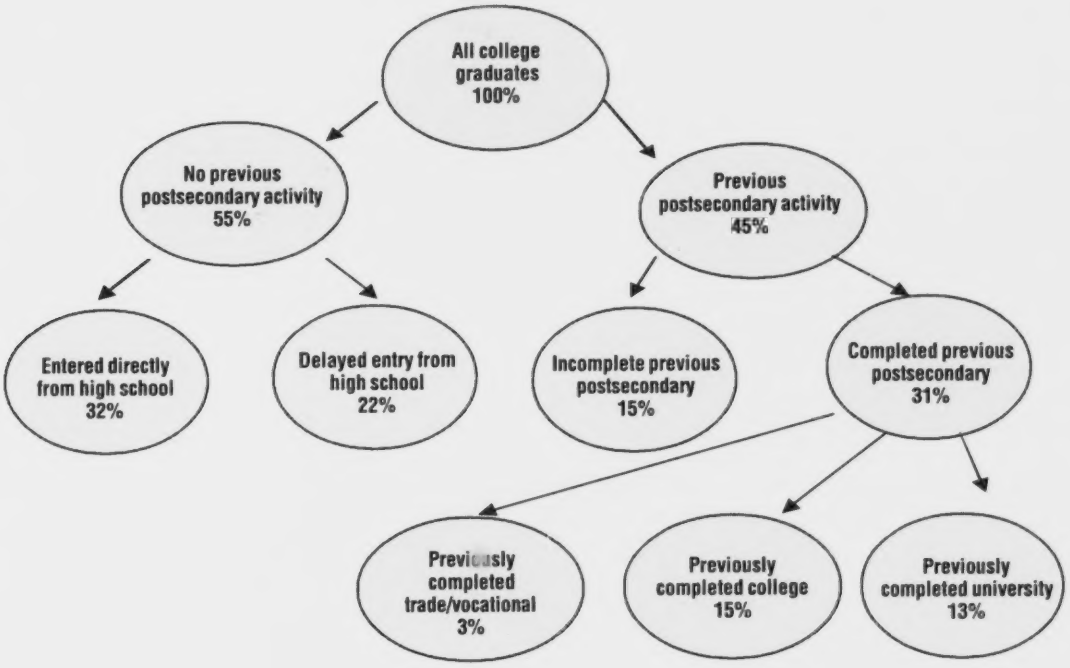
Graduates from college and bachelor programs differed in terms of their prior educational activities. A higher proportion of college graduates had previous postsecondary education compared to bachelor graduates outside of Quebec (45% versus 37% respectively). The majority of bachelor graduates (94%) in Quebec had previous postsecondary studies before entering their program which is in large part a reflection of the CEGEP prerequisite for university studies. At the bachelor level, 21% of graduates from Quebec and 18% of graduates from the rest of Canada had previously completed university studies. This suggests that a large number of 'horizontal' movements are occurring, resulting in approximately 20% of bachelor level graduates holding multiple university credentials.

A higher proportion of college graduates delayed their entry from high school to their program. Approximately one-fifth (22%) of college graduates had no previous postsecondary education and had been out of high school at least one year before entering their current program compared to only 10% of bachelor graduates outside of Quebec and 3% of bachelor graduates in Quebec.

The proportion of 2005 graduates who followed an indirect pathway to their postsecondary studies increased compared to 2000. For example, more 2005 graduates had pursued previous postsecondary studies: the proportion of college graduates with previous postsecondary activity increased from 35% in 2000 to 45% in 2005, while the proportion of bachelor graduates outside of Quebec[4] with previous postsecondary education increased from 32% in 2000 to 37% in 2005. Additionally

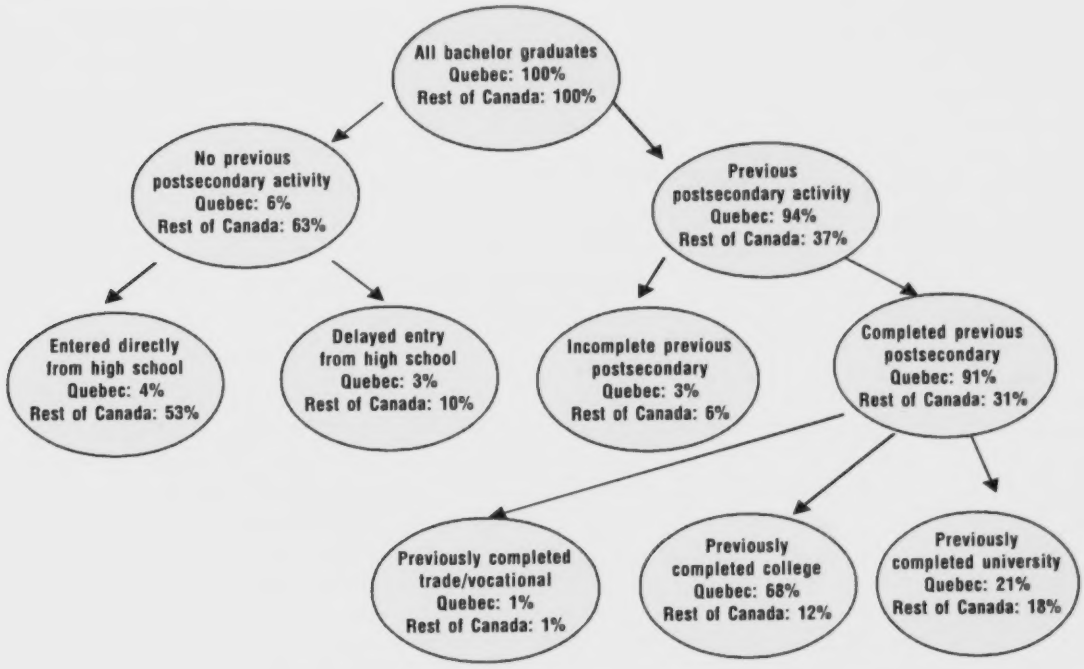
a lower proportion of 2005 college graduates entered their program directly from high school (32% versus 36% for 2000 college graduates). Similarly a lower proportion of 2005 bachelor graduates outside of Quebec entered into their program directly from high school (53% versus 58% for 2000 bachelor graduates).

Figure 1.2.1
Educational activity prior to entry into college program


All college graduates 100%
No previous postsecondary activity 55%
Previous postsecondary activity 45%
Entered directly from high school 32%
Delayed entry from high school 22%
Incomplete previous postsecondary 15%
Completed previous postsecondary 31%
Previously completed trade/vocational 3%
Previously completed college 15%
Previously completed university 13%

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Figure 1.2.2
Educational activity prior to entry into bachelor program



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Summary

Females from the Class of 2005 made up the majority of graduates at the college, bachelor and master level and their proportions increased across all levels except for the master compared to the Class of 2000. Males continued to dominate in historically male-dominated fields of study such as Mathematics, computer and information sciences and Architecture, engineering and related technologies. On the other hand, the proportion of females in these fields increased slightly with level of study such that the proportions of females in these fields of study at the master level were higher than those at the college and bachelor levels.

Graduates from the Class of 2005 were more likely to follow indirect pathways to their programs compared to those from the Class of 2000 as reflected by the higher proportion of graduates who delayed entry to their studies and the higher proportion who had previously pursued postsecondary education. In particular, approximately one-fifth of bachelor level graduates had previously completed a university program.

Section 2

Educational and labour market activities after graduation

Graduates of postsecondary programs generally follow one of two pathways: either they opt to enter the workforce directly, or they choose to pursue further education. These choices may be influenced by a variety of factors, such as the perception of greater earning potential with a higher degree, family responsibilities, or current labour market conditions and availability of jobs. Some types of postsecondary programs prepare graduates for specific jobs, whereas others are more general, making the transition from school to work less straightforward. The following sections provide details on graduates pursuing further education after 2005, and the labour market outcomes of those who chose instead to enter the labour market immediately after graduation.

2.1 Further education

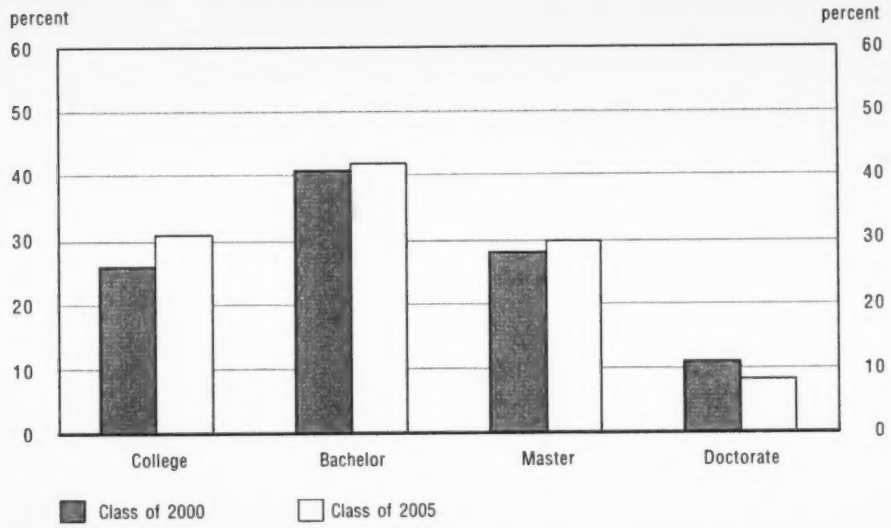
The National Graduates Survey data show that although most graduating students did not pursue further education immediately after graduation, more graduating students in the class of 2005 continued with their studies after graduation than those of the class of 2000.

Over one-third (36%) of the Class of 2005 pursued further education and this varied by level of study as shown in Chart 2.1. More bachelor level graduates pursued further education (42%) while a similar proportion of college and master level graduates did so (31% and 30% respectively). In contrast, a small proportion of doctorate level graduates pursued further education.

A higher proportion of the Class of 2005 graduates pursued further education than the Class of 2000 (36% versus 33% respectively). This increase was primarily attributable to the increased proportion of college graduates who continued their studies, up from 26% for the Class of 2000. In contrast, the proportion of doctorate graduates who pursued further education was lower for the Class of 2005 (8% versus 11% for the Class of 2000) while the proportions of bachelor and master graduates who pursued further studies increased slightly (Chart 2.1).

Chart 2.1

Percentage of graduates who pursued further education after graduation, by level of study



Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

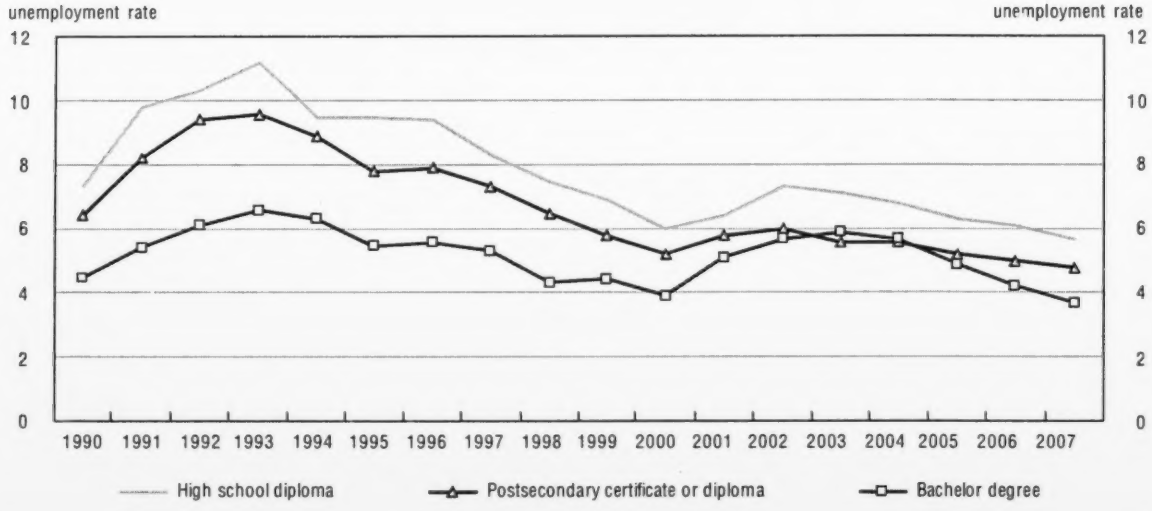
The proportion of graduates who pursued further studies varied by field of study. As shown in Appendix table A.2, at the college level, Humanities graduates were the most likely of all fields of study to pursue further education (77%), while at the bachelor and master levels, graduates in Physical and life sciences, and technologies were the most likely to continue after completing their studies (69% and 46% respectively). In contrast, at the college level, graduates of the Other health professions and related clinical sciences were the least likely to pursue further education (19%) as were graduates in Education at the bachelor and master levels (16% and 18% respectively).

2.2 Graduates in the workforce

The majority of graduates from the Class of 2005 (64%) did not pursue further studies in the two years following graduation and were able to enter the workforce directly. This proportion was slightly lower than that for the Class of 2000 (67%), even though the Class of 2005 was entering the labour market at a time when unemployment rates were decreasing (Chart 2.2) and work opportunities were opening up.

Chart 2.2

Unemployment rates by level of education, 25 to 44 year olds, 1990 to 2007



Source: Statistics Canada, Labour Force Survey, 1990 to 2007.

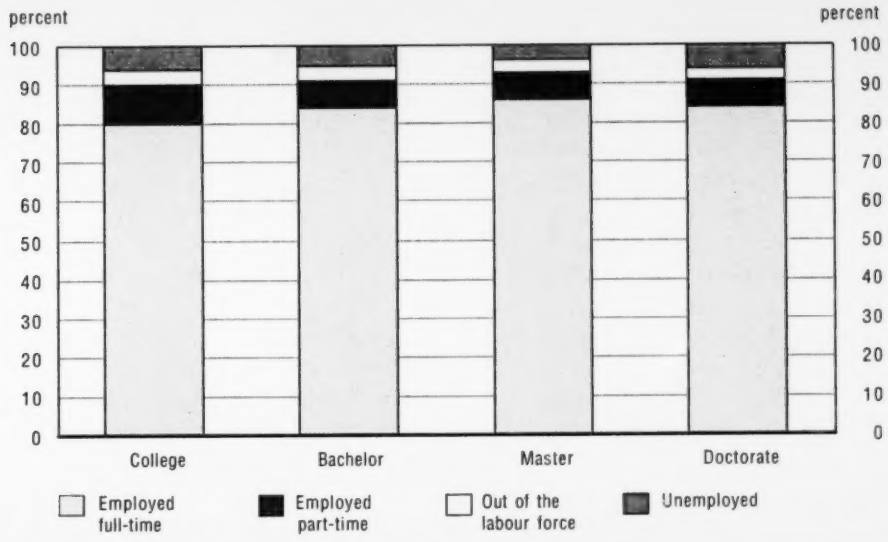
Trends from the Labour Force Survey show that those with postsecondary education fare consistently better in the labour market than do those with high school only (Chart 2.2). The National Graduates Survey provides further insight on the labour market outcomes of graduates; this section will explore these outcomes in terms of employment and earnings, by level of study, field of study, and gender.

2.2.1 Employment

Nine out of 10 college, bachelor, master and doctorate graduates who had not taken further education were working two years after graduation (Chart 2.3). A slightly lower proportion of college graduates were working full-time compared to graduates at other levels, while the proportion working part-time was similar among bachelor, master and doctorate graduates, at 7%.

Chart 2.3

Proportion of 2005 graduates working full-time and part-time, unemployed, and out of the labour force, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Employment rates were highest for master graduates

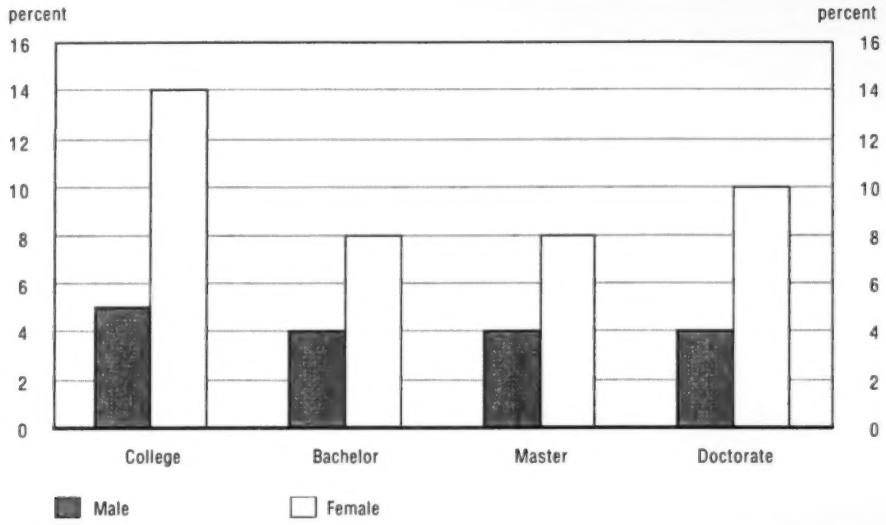
A higher proportion of both male and female graduates of master programs were working full-time in 2007 compared to college, bachelor or doctorate graduates. While the pool of master graduates increased in 2005 compared to 2000 for both males and females, the employment rate among master graduates remained stable for men at 94%, but increased for women, from 89% in 2002 to 92% in 2007 (see Appendix table A.3). Consequently, among master graduates, the gap in employment rates between women and men has nearly closed.

The proportion of women working part-time was more than twice that of men in 2007

More women than men were working part-time in 2007 at all levels of education. As shown in Chart 2.4, at the bachelor and master levels, the percentage of women working part-time was double that of men, and the difference was even greater at the doctorate level. The gap was largest among college graduates, however; 14% of female college graduates from 2005 were working part-time in 2007, compared to just 5% of males (see Appendix table A.3.)

Chart 2.4

Proportion of 2005 graduates working part-time in 2007, by gender and level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Employment rates by field of study vary across levels of study

While variation in full-time versus part-time employment exists by level of education, there are also some differences by field of study. Graduates in certain fields are more likely to be employed than others at all levels of education; in other fields, employment rates are higher for those with a master or bachelor degree than for college graduates. The next section will examine employment rates by field of study.

It is difficult to identify consistent patterns in employment by field of study; rates of full-time employment do not necessarily increase by level of education within individual fields, and some fields have high employment rates only at one level, and lower rates at all others. Architecture, engineering and related technologies, however, is an example of a field of study in which a degree or diploma appears to lead directly to employment, regardless of the level – this field had one of the highest percentages of graduates working full-time in 2007 at all levels of education, ranging from 86% among college graduates to 93% among bachelor graduates (See Appendix table A.4).

As mentioned previously, overall, bachelor graduates had higher rates of full-time employment than college graduates. This was true for nearly all fields of study, with the exception of Visual and performing arts and communications technologies, the only field in which full-time employment was significantly higher among college graduates (77%) compared to graduates with a bachelor degree (71%).

Full-time and part-time employment rates varied within some fields of study by level of study. For example, nurses with a bachelor degree were far more likely to be employed full-time in 2007 than their counterparts at the college level – 86% compared to 72%, respectively – and the rate of part-time employment was nearly three times higher for nurses with a college degree. Despite these differences, nursing graduates had among the highest overall employment rates of any field – 96% at the college level, and 95% at the bachelor level (See Appendix table A.4).

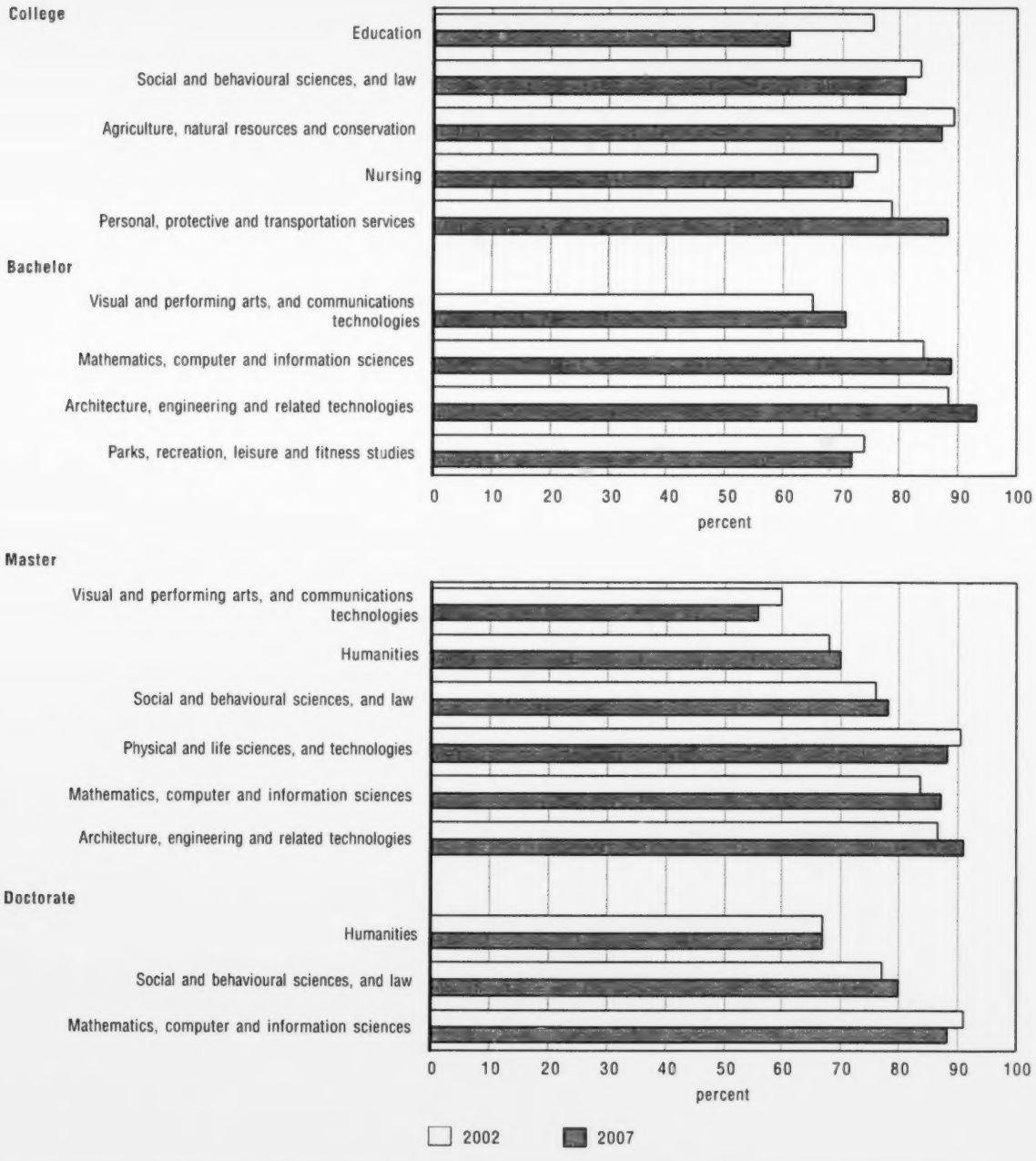
Among all fields of study, college graduates in Education were the least likely to be employed full-time. Full-time employment among college graduates in the Education field fell from 75% in 2002 to 61% in 2007. The proportion of graduates in Education who worked full-time was higher for bachelor degree holders (77%), although the unemployment rate for college and bachelor degree holders was similar. This indicates that compared to college graduates in Education, the difference in employment for bachelor graduates was from part-time to full-time work, rather than from no work to full-time work. It should also be noted that the number of Education graduates at the bachelor level rose from 13,500 in 2000 to 16,400 in 2005, while the number of college graduates in Education decreased by more than half.

Growth in full-time employment two years after graduation between the Class of 2000 and 2005 varied by level of study and field of study

Growth in full-time employment among 2005 graduates compared to 2000 graduates varied greatly across education levels and fields of study (see Chart 2.5). In fact, at the college level, the rate of full-time employment actually fell in many fields between 2002 and 2007 – most notably Education, from 75% to 61%, as mentioned previously. At the bachelor level, full-time employment grew moderately for graduates from 2005 compared to graduates from 2000 in almost all fields. At the master level, full-time employment increased in some fields of study, while in others there were declines.[5]

Chart 2.5

Rate of full-time employment two years after graduation for 2000 and 2005 graduates, by level of study and selected field of study


College
Education
Social and behavioural sciences, and law
Agriculture, natural resources and conservation
Nursing
Personal, protective and transportation services
Bachelor
Visual and performing arts, and communications technologies
Mathematics, computer and information sciences
Architecture, engineering and related technologies
Parks, recreation, leisure and fitness studies
0 10 20 30 40 50 60 70 80 90 100
percent
Master
Visual and performing arts, and communications technologies
Humanities
Social and behavioural sciences, and law
Physical and life sciences, and technologies
Mathematics, computer and information sciences
Architecture, engineering and related technologies
Doctorate
Humanities
Social and behavioural sciences, and law
Mathematics, computer and information sciences
0 10 20 30 40 50 60 70 80 90 100
percent
2002
2007

Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

2.2.2 Earnings

While it is important to know what degree of success graduates of various programs had in finding employment after finishing school, their earnings will give a more complete picture of how graduates are faring in the workforce. The following section examines graduates' earnings by level of education and field of study, as well as gender.

Earnings increased with education levels

While a relatively similar proportion of 2005 college, bachelor, master and doctorate graduates were able to find work two years after graduation, there were differences in terms of their earnings. The median annual earnings among those who were working full-time was lowest for college graduates at $35,000 and this increased to $45,000 for bachelor graduates, $60,000 for master graduates and $65,000 for doctorate graduates (Appendix table A.5). The largest earnings premium[6] existed between the bachelor and master levels at 33% compared to a 29% earnings premium between the college and bachelor level and an 8% earnings premium between the master and doctorate levels.

Although earnings generally increased by level of study, there were large distributions of annual earnings within each education level. Consequently, some college graduates earned more than many bachelor graduates. For example, 25% of college graduates earned $44,300 or more annually while 50% of bachelor graduates earned $45,000 or less (Appendix table A.5).

Interpreting earnings

Information on earnings is for graduates working full-time who have not pursued or completed any further education since graduating in 2005. Readers should keep in mind when interpreting earnings results that there are many potential reasons for differences in earnings between graduates from different programs and different levels of education. For example, the results presented in this report do not necessarily reflect graduates' highest level of education, but simply the most recent; so a graduate could have a master degree completed previously, and a college diploma completed in 2005. This individual would be counted as a college graduate, even though his or her earnings might be more reflective of the master degree.

Male graduates had higher earnings than female graduates, at all levels of education

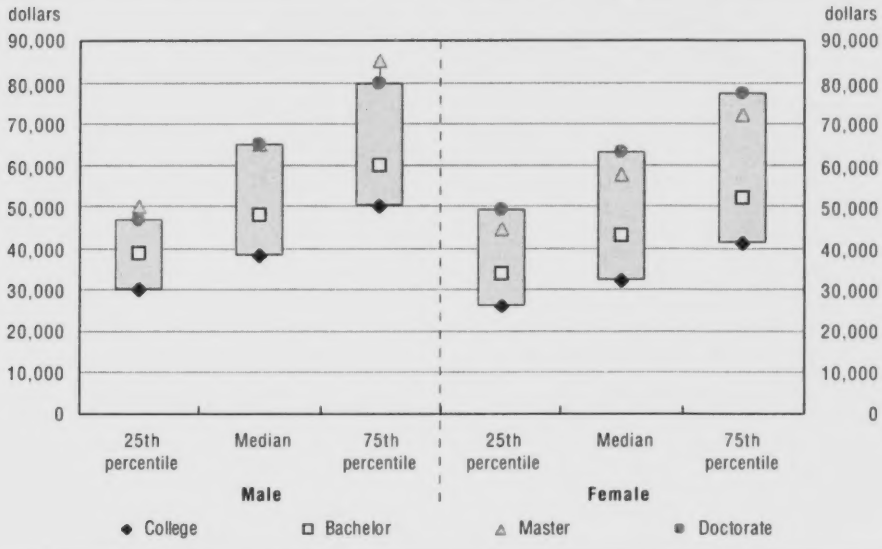
The difference in annual earnings by level of education differed for males and females who were working full-time (Chart 2.6). For females, the median earnings increased by level of education. For males, the median earnings increased from the college to bachelor level and from the bachelor to master level but stayed the same between the master and doctorate levels.

Across all levels of education, males typically earned more than females (Chart 2.6). Furthermore, as the earnings level (percentile) increased, the gap between the genders increased as well – at least among college, bachelor and master graduates. At the doctorate level, the difference between male and female earnings still existed at the median and the 75th percentile, but was narrower than at other

levels of education. At the 25th percentile, however, earnings of female doctorate graduates actually exceeded those of males by $2,400. The largest earnings gap between the genders was at the master level, at the 75th percentile, where gross earnings for males exceeded those of women by $13,000. This pattern did not change from five years before.

Chart 2.6

Earnings distribution of 2005 graduates working full-time in 2007, by gender and level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Earnings varied by field of study as well; however, further discussion of graduate earnings by field of study should be done with education level in mind, since earnings distributions across fields are very different at the college, bachelor, master and doctorate levels. Charts 2.7.1, 2.7.2, 2.7.3, and 2.7.4 show these distributions for each level. Appendix table A.6 contains complete information on earnings by field of study.

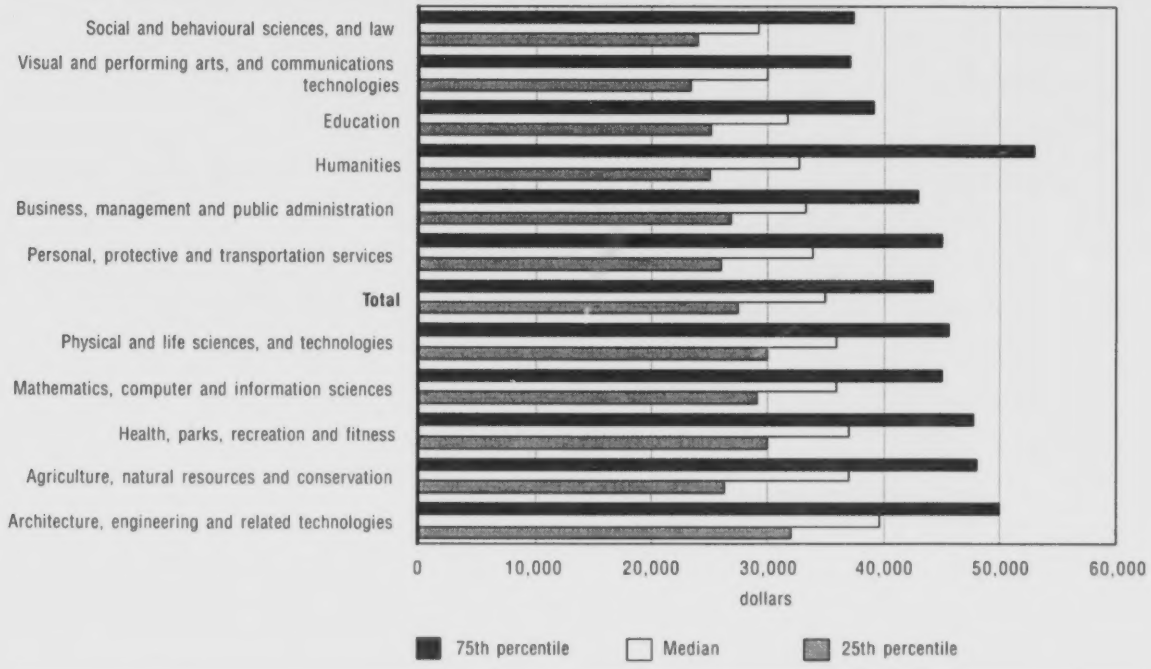
Among college graduates, typical (median) earnings were highest for those graduating from Architecture, engineering and related technologies and lowest for those graduating from Social and behavioural sciences, and law. Among bachelor graduates, typical earnings were highest for those graduating from Health, parks, recreation and fitness and lowest for those graduating from Visual and performing arts, and communications technologies. At the master level, a typical graduate from Personal, protective and transportation services earned more than typical graduates from other fields of study and almost three times the earnings of a typical graduate from the field of Visual and performing arts, and communications technologies, which was the field with the lowest median earnings. Doctorate graduates in Business, management and public administration had the highest median earnings,

almost twice that of doctorate graduates in Physical and life sciences, and technologies, who had the lowest median earnings.

Looking at earnings distributions within various fields of study (the range between the highest and lowest earners in a given field), some fields of study, such as Nursing, had narrower earnings distributions while others, such as Humanities, had wider distributions. The field of Humanities stands out at the college level: the highest-earning graduates of college-level Humanities programs made more than twice as much as their counterparts at the lowest-earning end of the spectrum (in dollar figures, this corresponds to $25,000 at the 25th percentile and $53,000 at the 75th percentile.) At the bachelor and master levels, the difference between highest and lowest earners in Humanities was less pronounced, though still among the highest of all fields of study. Among doctorate graduates, however, it was the lowest.

Chart 2.7.1

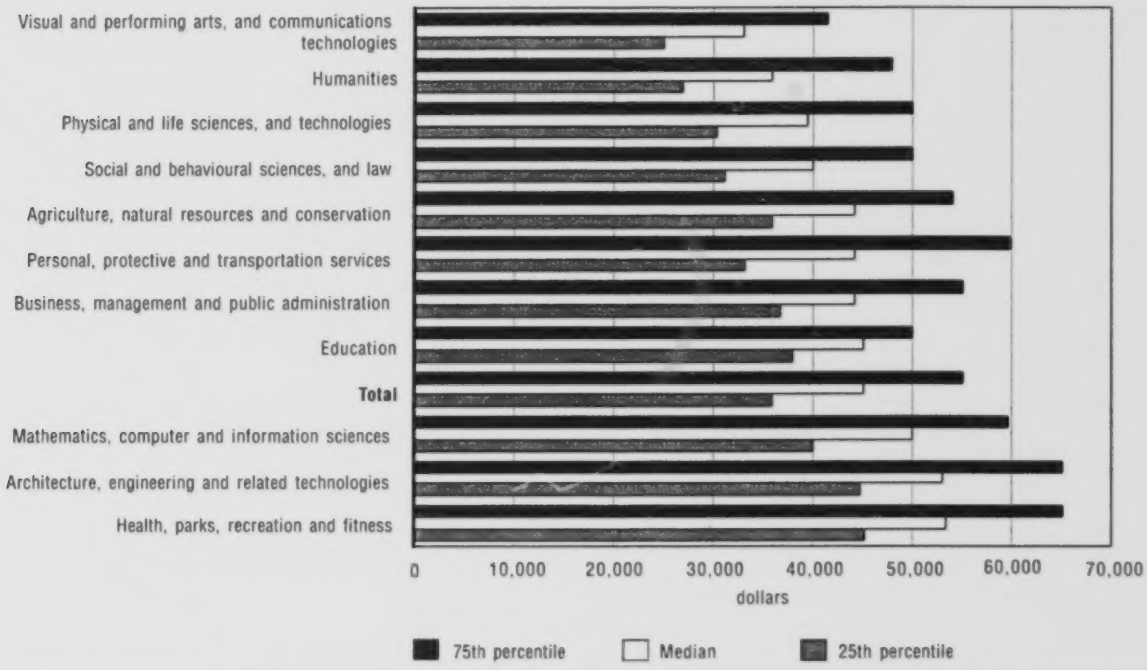
Earnings distribution of 2005 graduates working full-time in 2007, by field of study and level of study – college



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Chart 2.7.2

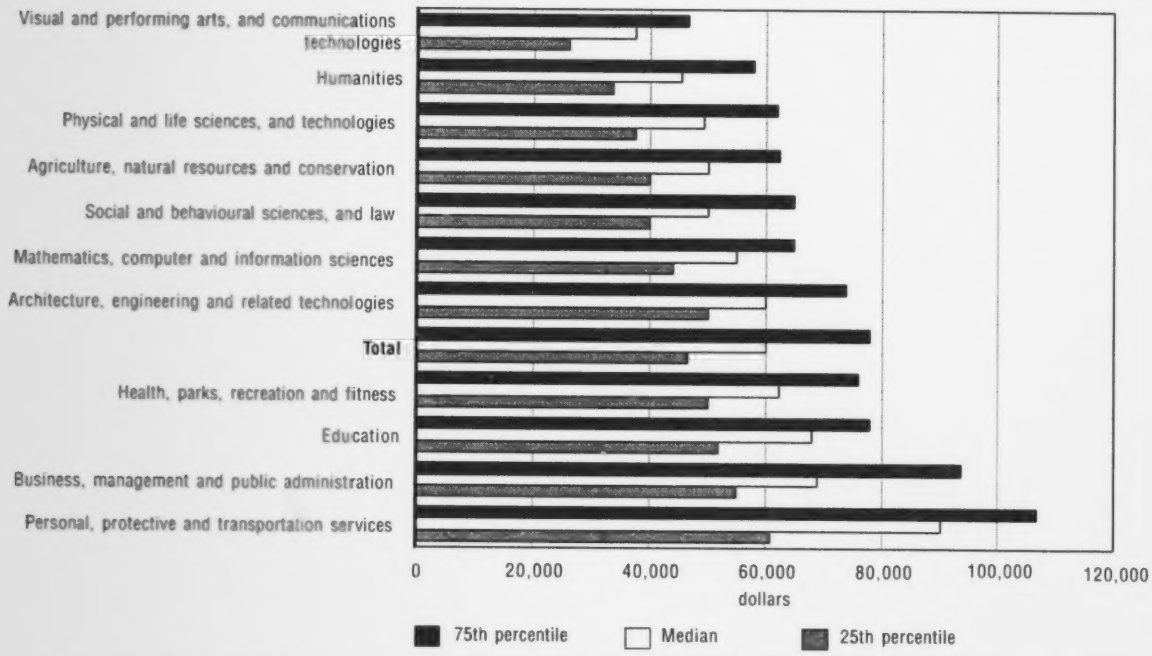
Earnings distribution of 2005 graduates working full-time in 2007, by field of study and level of study – bachelor



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Chart 2.7.3

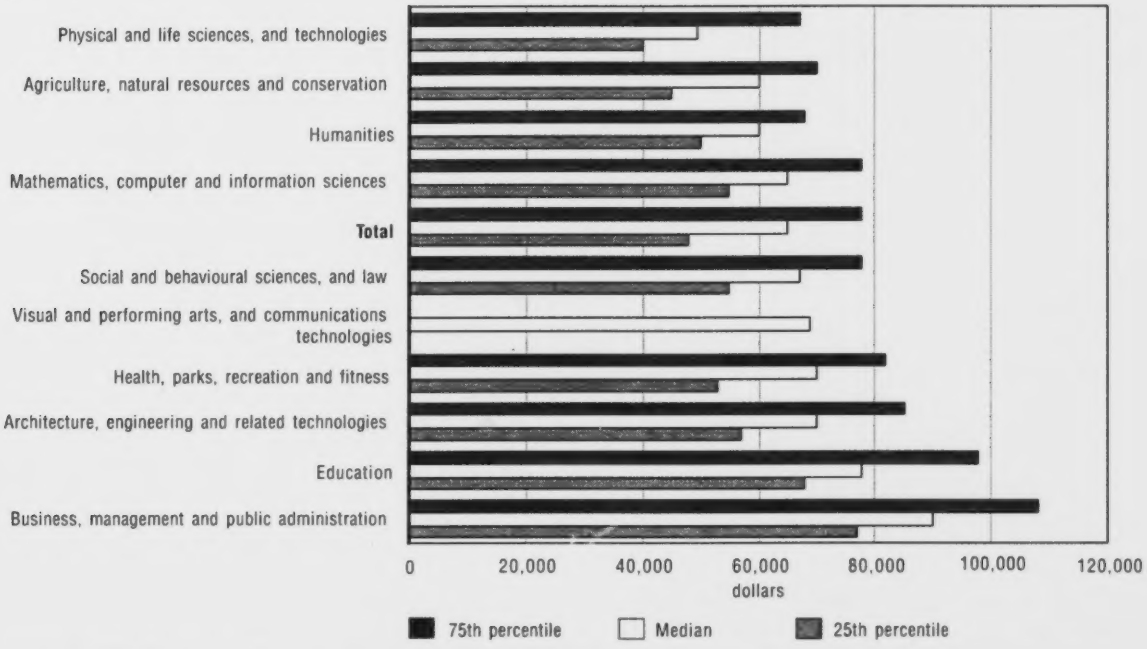
Earnings distribution of 2005 graduates working full-time in 2007, by field of study and level of study – master



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Chart 2.7.4

Earnings distribution of 2005 graduates working full-time in 2007, by field of study and level of study – doctorate



Source: Statistics Canada, National Graduates Survey (Class of 2005).

As mentioned previously, earnings increased with education levels. Generally this was also the case when examined by field of study. While graduates' earnings in 2007 in most fields followed the overall pattern of increasing with higher levels of education, some fields showed the greatest benefit at the master level, while in others, the largest increase occurred at the bachelor or the doctorate level. For instance, Education graduates at the bachelor level earned 42% more in 2007 than graduates from college-level Education programs ($31,700 at the college level, compared to $45,000 at the bachelor level); at the doctorate level, graduates in the field of Visual and performing arts, and communications technologies, earned almost twice as much as those with a master degree in that field ($37,500 among master graduates, $69,000 for doctorates).

Comparing earnings two years after graduation between the Class of 2000 and 2005 showed that median earnings increased among graduates of some fields while decreasing in others

At the aggregate level, graduates' earnings increased at all levels of education from 2002 to 2007, but only slightly, between 1% and 4%. Median earnings for graduates of Education programs at all levels increased from five years before (in constant dollar terms). On the other hand, earnings among graduates of Mathematics, computer and information sciences programs decreased, regardless of the level of education (from college to doctorate graduates).

Among doctorates, graduates of traditionally male-dominated program areas (Physical and life sciences and technologies, Mathematics, computer and information science, and Architecture, engineering and related technologies) were earning less in 2007 compared to the previous cohort (2000 graduates interviewed in 2002, with earnings expressed in constant dollar terms.) On the other hand, graduates of doctoral programs in Education, Business, management and public administration, and Agriculture, natural resources and conservation, were earning more.

Summary

The 2007 NGS showed that a lower proportion of graduates from the Class of 2005 entered the workforce after graduation compared to the Class of 2000, despite favourable labour market conditions. Among those who did not take further education, employment rates two years after graduation were high across all levels of study, ranging from 90% for college to 93% for master graduates.

While a relatively similar proportion of 2005 college, bachelor, master and doctorate level graduates were able to find work two years after graduation, there were differences in terms of their earnings. The largest earnings premium existed between the bachelor and master levels suggesting that investing in further post-graduate work is financially beneficial. On the other hand, the earnings premium between a master level and doctorate level suggests that the monetary gain from employment two years after graduation for doctorate students is marginal. A further follow-up survey, which will occur five years after graduation, will reveal whether earnings premiums among education levels change over the long-term.

Labour market outcomes varied by gender. Female graduates were more likely to be working in part-time jobs at all levels of education compared to males, and those who were working full-time generally earned less. The NGS can be used to identify whether more women are choosing to work part-time, or if full-time employment is less readily available in fields where the majority of graduates are women. Additionally, the NGS could be used to identify whether earning differentials among full-time workers are a result of differences in fields of study or occupation choices.

While this report does not go into detail on labour market outcomes by field of study it does reveal that the distribution of earnings varies greatly across fields of study and also varies within fields of study by level of education. Data from the NGS could explore the relationship between fields of study and occupational choices and the impact this has on labour market outcomes.

Section 3

Student loans and debts

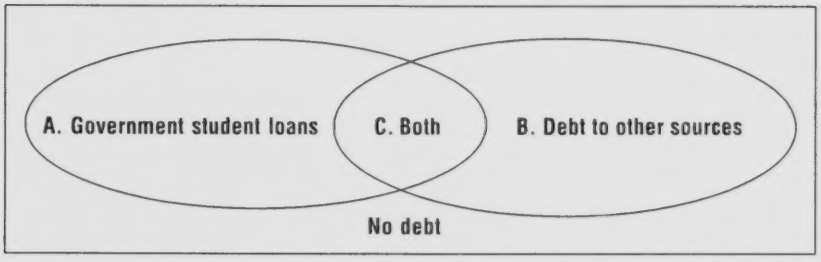
Students making their way through the Canadian postsecondary education system are faced with costs that vary along a number of dimensions, including the level of education and field of study, the province of their educational institution, and the time spent completing their degree. When choosing to finance their postsecondary education, students can opt for any combination of government student loans, employment earnings, private loans, family support, and savings, among others. For many, both government and non-government student debt becomes an integral component of life after graduation. The following section provides an overview of different forms of student debt and their relation to education levels. Specifically, it will start with graduates who owed to either government or non-government sources, followed by graduates owing to non-government sources, graduates owing to only government sources, and finally, graduates owing both types of debt. All analyses in the following section were limited to graduates that did not pursue further education within the two years after graduation.

3.1 Overview of student debt

Nearly half of all graduates in 2005 that did not pursue further education had some form of student debt upon graduation

Out of the 194,600 graduates of 2005 that did not pursue further education, 49% of them financed their postsecondary education with some form of education-related loan. The proportion of graduates owing money to any source at graduation varied across the educational levels, from 44% of doctoral graduates to 54% of bachelor graduates.

Figure 3.1
Schematic diagram of student related debt



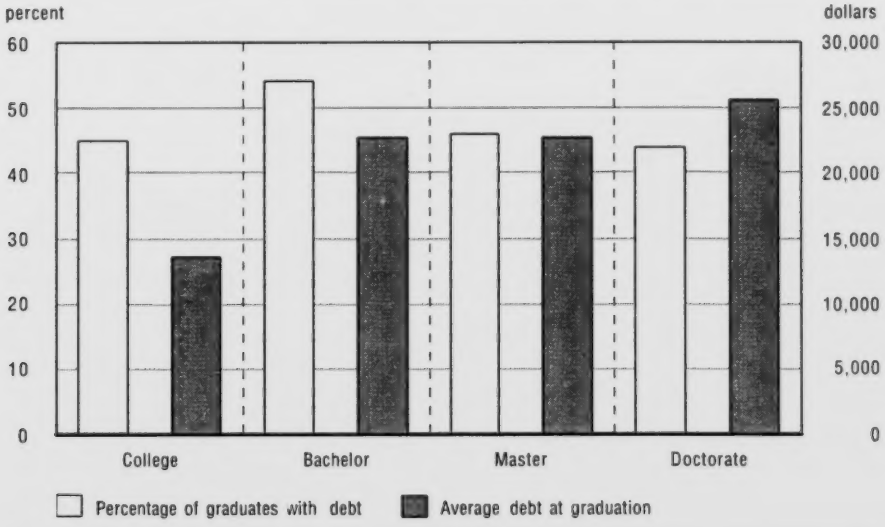
Information on student loans in the National Graduates Survey (Class of 2005)

Respondents of the National Graduates Survey were asked questions on the amount and type of loans they had used to finance their education. This included information on debt that was financed through government or non-government sources and the corresponding amounts. For example, government-financed loans would be considered a government source while private, bank, or family loans would be considered as non-government sources. The amount that graduates owed at the time of graduation may include debt accumulated from past postsecondary education and may not be directly related to the most recent degree, diploma or certificate. For the purpose of this analysis, only graduates that did not pursue further education in the two years upon graduation and thus required to start paying back their student debt are included.

Similarly, of the graduates that held debt related to financing their education, substantial variation existed in their average debt levels from all sources, ranging from $13,600 to $25,600. College graduates[7], characterized by shorter program durations, had the lowest average overall debt level, followed by bachelor, master, and finally doctorate graduates. Chart 3.2 shows the percentage of graduates owing money to all sources and the average amount of debt upon graduation at each level of education.

Chart 3.2

Incidence and average amount of debt to all sources (government and non-government) at time of graduation, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Out of the 54% of bachelor graduates who had some form of student debt at graduation (roughly 51,000 graduates), almost 80% of them had a government debt. This was similar across all levels of education: 76% (of the 45%) of college graduates, 74% (of the 46%) at the master level and 77% (of the 44%) of doctorates. The average debt levels of these student loans were very similar to the average debt of graduates that owed only to government sources (see table A.7 in appendix).

Despite average debt loads exceeding $20,000 for graduates with student debt at the bachelor, master, and doctorate levels, about a quarter had paid off their overall debt two years after graduating. Master degree graduates had the highest proportion (32%) that had paid off their student related debt (both government and non-government), followed by doctorate (30%), bachelor (28%), and finally college graduates (24%).

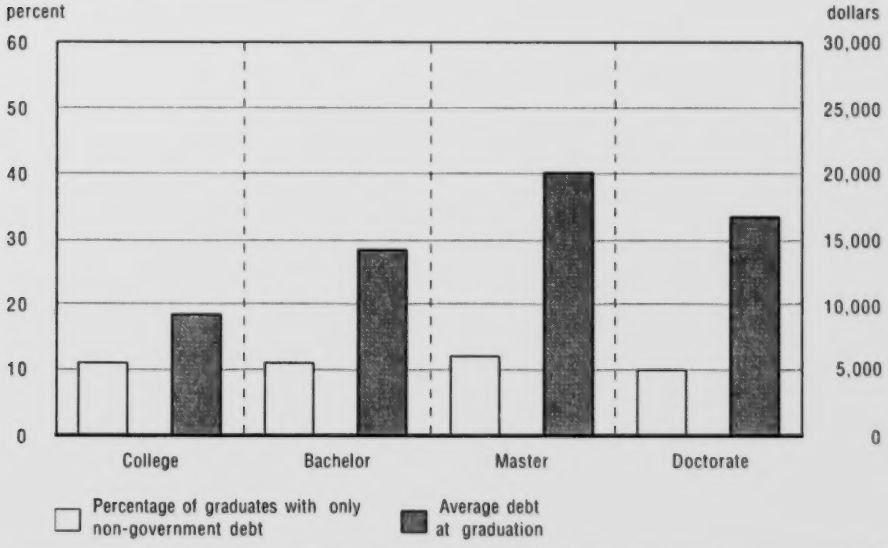
One in nine graduates had debt owing only to non-government sources, with little variation across education levels

About 22,000 graduates – or 11% of all graduates from 2005 who did not pursue further education – owed debt only to non-government sources. Non-government student loans, consisting mostly of private, bank or family loans, varied little across the educational levels, with a range of 10% of doctorates to 12% of masters.

The average debt size of graduates owing only non-government student loans, however, showed that higher levels of education were associated with higher levels of debt. Chart 3.3 shows that the average debt owed only to non-government sources at graduation ranged from $9,300 at the college level to over $20,000 at the master level.

Chart 3.3

Incidence and average amount of debt to non-government sources only at time of graduation, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

There was a large proportion of graduates that had paid off their non-government student debt entirely two years after completing their 2005 diploma or degree. Overall, 43% of all 2005 graduates owing only to non-government sources had fully paid off their student debt two years after graduation, with bachelor graduates having the highest proportion (45%) followed by doctorate graduates (42%), and college and masters (41%).

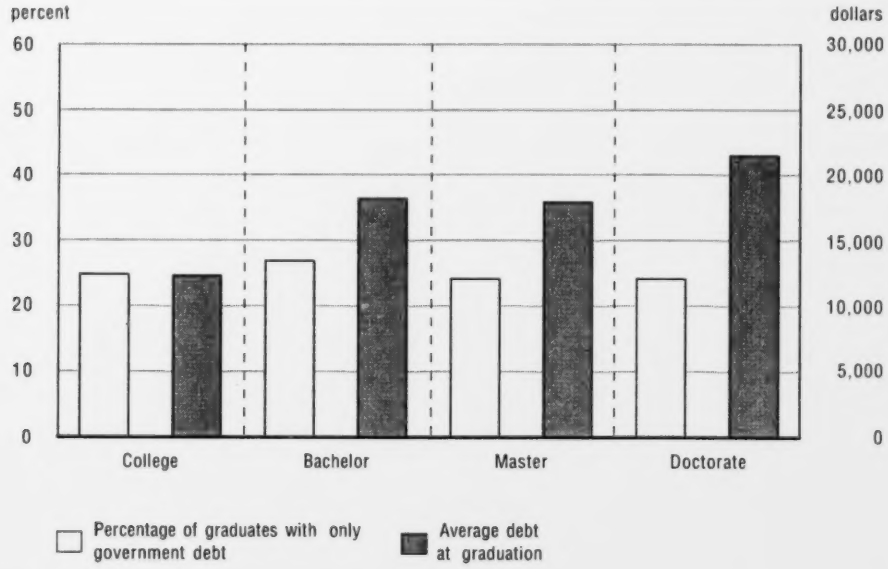
About a quarter of graduates who did not pursue further education owed only to government-financed student loans

Roughly 50,000 graduates – or about 26% of all 2005 graduates who did not pursue further education – owed money only to government sources upon graduation. The proportion of graduates owing across the educational levels did not differ substantially, with 25% of college graduates, 24% of master and doctorate graduates, and 27% at the bachelor level.

The average debt size of graduates owing only to government sources was highest among doctorates ($21,600) and was lowest for college graduates ($12,300). Bachelor graduates, representing almost half of all graduates owing only government student loans at graduation, owed on average $18,200. Chart 3.4 shows the distribution of graduates that owed only to government sources and the average size of this debt.

Chart 3.4

Incidence and average amount of debt to government sources only at time of graduation, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

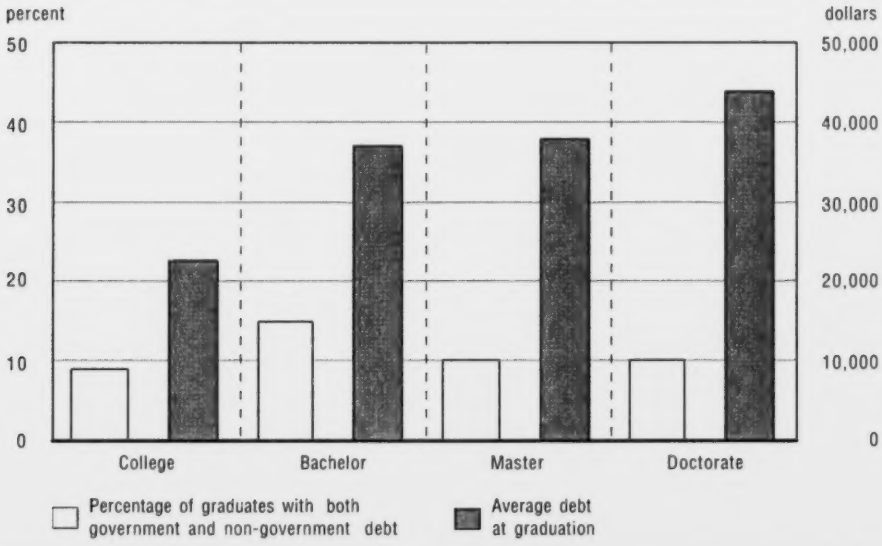
Overall, nearly 14,000 graduates – or roughly 27% of those owing only to government sources at time of graduation – had paid off their debt two years later. The proportion differed across the education spectrum with graduates from a master degree having the highest proportion paying off this debt (34%), followed by doctorate graduates (33%), bachelor (31%), and lastly, college (20%).

Roughly 12% of graduates who did not pursue further education owed to both government and non-government sources

Over one in seven bachelor graduates who did not pursue further education owed to government and non-government sources. Similarly, about 10% of graduates from master and doctorate programs owed to both sources. Chart 3.5 shows, similar to charts 3.2, 3.3, and 3.4, the incidence and average amount of debt owed to both sources (government and non-government) by level of education.

Chart 3.5

Incidence and average amount of debt of graduates owing to both government and non-government sources at time of graduation, by level of study



Note: Please note that the scale on which estimated debt was plotted differed from previous figures because of the sheer size of average debts of those owing to both government and non-government sources.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

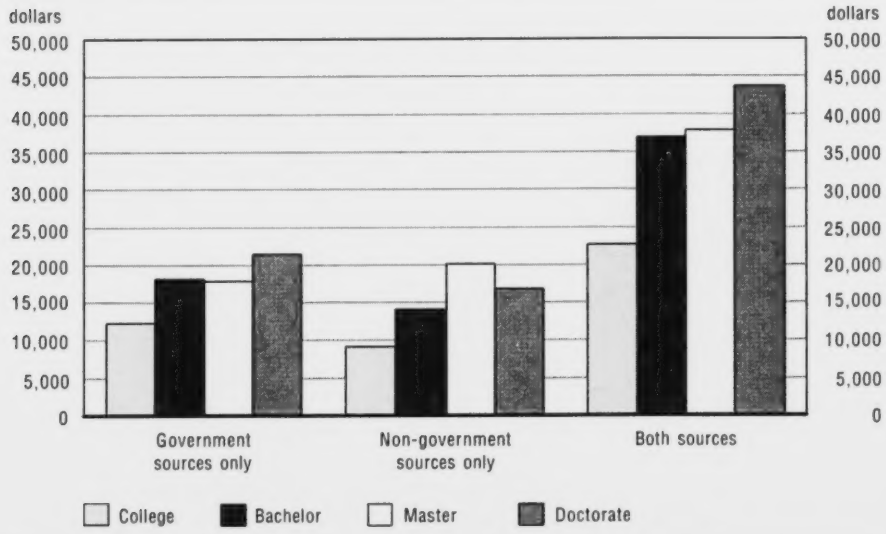
While the proportion of graduates owing to both sources of debt was not remarkably high, in relative terms, the average amount owed differed substantially from those that owed to only one type of debt source.

The first substantial difference apparent in Chart 3.6 below was the magnitude of the average debt owed relative to average amounts owed to single sources. For example, the average debt of a graduate with a college degree who owed to both sources at graduation was $1,000 more than combining both the average debt of those who owed only to government sources with the average debt of those who owed only to non-government sources at the college level.

The second substantial contrast apparent from Chart 3.6 was the difference in average debt amounts between levels of education. The difference between the average debt (for those owing to both sources) of a college graduate and that of a bachelor graduate was $14,400. A further and more complete analysis should be undertaken on the composition of debt of these graduates.

Chart 3.6

Average amount owed to government sources only, non-government sources only, and both sources, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

The next section will discuss how the proportion of graduates owing debt (both government and non-government), as well as how much they owed on average have changed compared to graduates of 2000. For comparison purposes, all forms of debt were converted to 2007 constant dollars.

The proportion of graduates with any debt upon graduation and the average size of this debt were similar for the 2000 and 2005 graduating classes

As indicated earlier, roughly half of all 2005 graduates who did not pursue further education owed money to either a government or non-government source for their post-secondary education. This proportion was almost identical to the proportion of graduates of 2000 who owed debt to any source (50%). Given that the 2005 class represented a higher number of graduates than all of the previous graduating cohorts, the number of graduates with any source of debt rose from 89,700 in 2000 to 96,300 in 2005.

The average debt from all sources in constant 2007 dollars among members of the 2005 cohort that owed student related debt did not differ much from the class of 2000. The differences, albeit small, revealed that graduates from 2005 with student debt had lower average debt levels than their 2000 counterparts: doctorate graduates owed about $1,300 less on average while college graduates owed about $700 less.

Graduates from the Class of 2005 owing only to non-government sources, tended to owe more on average than their 2000 counterparts across all levels of education

The 2005 graduating class had a higher proportion of graduates that owed only to non-government sources, and the average debt level of these graduates was higher relative to similar graduates of 2000. Specifically, 2005 college diploma holders owed about $1,400[8] more, bachelors owed about $3,600 more, and master graduates about $4,100 more. In terms of percentage differences, bachelor graduates with non-government debt only owed 32% more than bachelor degree holders of 2000 while 2005 master graduates owed 24% more than their 2000 counterparts. Table 3.1 shows that the proportion of graduates and their average debt level (non-government only) was higher in 2005 than in 2000 across most levels of education.

Table 3.1

Proportion and average debt (in 2007 constant dollars) of 2000 and 2005 graduates owing to non-government sources only, by level of study

	Proportion of graduates		Average amount of student debt (2007 constant dollars)		
	Class of 2000	Class of 2005	Class of 2000	Class of 2005	Difference
	percent	percent	dollars	dollars	dollars
College	8	11	8,300	9,700	1,400
Bachelor	8	11	11,100	14,700	3,600
Master	7	12	16,800	20,900	4,100
Doctorate	7	10	18,000	17,500	-500

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All amounts are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

The proportion of graduates owing only to government sources and their average debt load was lower among 2005 graduates relative to the 2000 cohort

Across all levels of education in 2005, the proportion of graduates who owed only to government sources dropped from the levels observed in 2000: table 3.2 reveals that there was an 8 percentage point decline in the proportion of college graduates with only government debt, a 7 percentage point decline at the bachelor level, a 6 percentage point decrease for masters graduates, and finally, 2 percentage points at the doctorate level.

Not only were the proportion of graduates owing only to government debt lower in 2005 compared to graduates of 2000 but the average debt level on these loans was lower than the levels of 2000 with the exception at the doctorate level. The largest difference in the average government debt level between 2005 and 2000 graduates was at the bachelor level, where 2005 graduates owed about $3,600 less.

Table 3.2

Proportion and average debt (in 2007 constant dollars) of 2000 and 2005 graduates owing to government sources only, by level of study

	Proportion of graduates		Average amount of debt (2007 constant dollars)		
	Class of 2000	Class of 2005	Class of 2000	Class of 2005	Difference
	percent	percent	dollars	dollars	dollars
College	33	25	14,600	12,800	-1,800
Bachelor	34	27	22,600	19,000	-3,600
Master	30	24	20,600	18,700	-1,900
Doctorate	26	24	20,900	22,500	1,600

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All amounts are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

In line with lower average debt levels (government sources only), the proportion of graduates with debt at graduation and who had paid off their government debt two years after graduating was higher among the 2005 cohort than the 2000 cohort (see Table 3.3 below).

Table 3.3

Proportion of 2000 and 2005 graduates who had paid off their government debt two years after graduation, by level of study

	Class of 2000	Class of 2005
	percent	percent
College	17	20
Bachelor	22	31
Master	27	34
Doctorate	32	33

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

A comparison between the two cohorts (Class of 2000 and Class of 2005) reveals that the proportions of graduates owing to both sources of student debt did not differ substantially for most levels of study. There was, however, a 4 percentage point increase in the proportion of bachelor graduates who owed to both government and non-government sources at graduation. If we convert the 2000 and 2005 debt owed to both sources at graduation to constant 2007 dollars, graduates of 2000 who owed to both sources of debt had higher average debt loads at the master and doctorate levels while graduates of 2005 with both types of loans had higher average debt at the college and bachelor levels. Table 3.4 shows the average amount of debt owed to both sources and the monetary difference between the two graduating classes.

Table 3.4

Proportion and average debt (in 2007 constant dollars) of 2000 and 2005 graduates owing to both government and non-government sources, by level of study

	Proportion of graduates		Average amount of debt (2007 constant dollars)		
	Class of 2000	Class of 2005	Class of 2000	Class of 2005	Difference
	percent	percent	dollars	dollars	dollars
College	8	9	22,400	23,600	1,100
Bachelor	11	15	37,600	38,600	900
Master	8	10	41,000	39,400	-1,600
Doctorate	12	10	50,000	45,500	-4,500

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All amounts are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

3.2 Government-financed student debt

The overview of debt (government and non-government) from the previous section revealed that graduates of 2000 and 2005 used debt to finance their education that varied in the size and whether it was a government or non-government loan. The graduates of the 2005 class who had debt were more likely to have owed only to non-government sources – and have larger average debt. Conversely, they were less likely to owe only to government sources – and their average debt was smaller. The average debt sizes also showed that some graduates had substantial financial burden once graduated. From this perspective, some graduates – especially those considered to have large debt – could have difficulties repaying their debt.

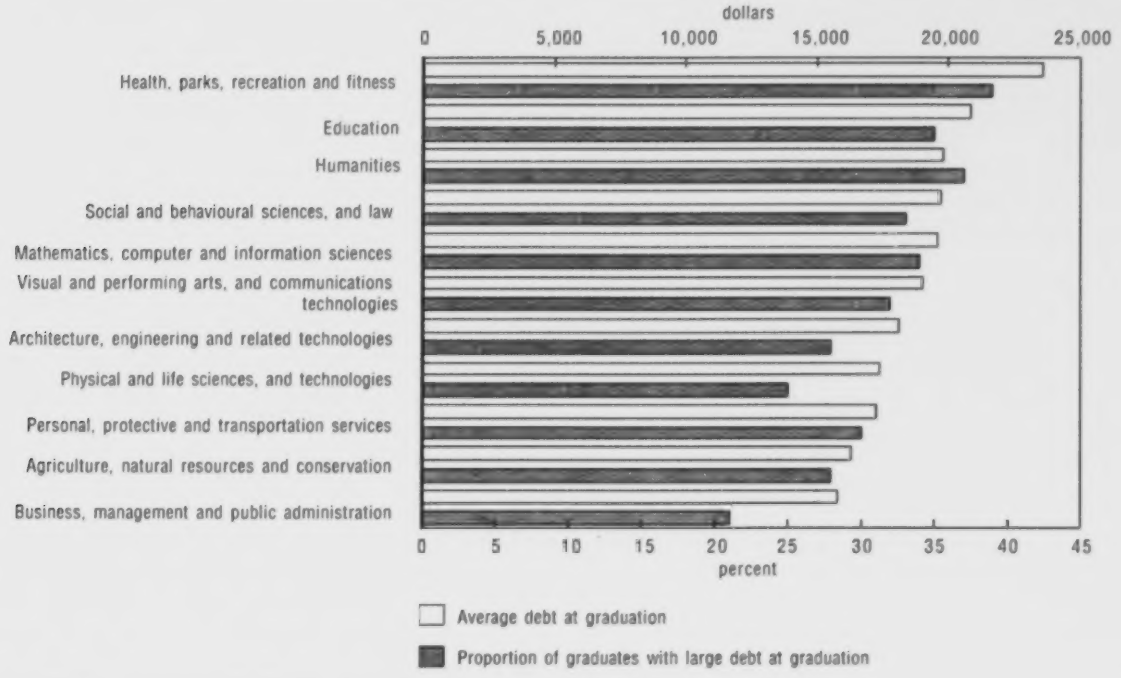
With a focus on government-financed student debt, the next section will outline large debt loads, personal income, difficulties in debt repayment, and debt-servicing ratios of graduates that did not complete any further education. The reader should make note that all references to debt in the next section refer to graduates who had government debt at graduation, and not the entire universe of 2005 graduates.

Overall, a number of students accumulated government-financed student debts of $25,000 or more at all levels of education

Out of the Class of 2005 who had government student loans, a substantial proportion of graduates with a college, bachelor, master or doctorate degree accumulated large debt loads – debt of $25,000 or more. Doctorate graduates with government debt had the largest proportion with large loans (35%) followed by bachelor (32%), master (27%) and college graduates (12%). Moreover, variation existed in the proportion of graduates with large debt across fields of study within each level of education. For example, 47% of college Humanities graduates and 11% of college Business graduates had large debt loads upon graduation. Chart 3.7 shows the size of average debt at graduation and the distribution of bachelor graduates across fields of study with large debt loads.[9]

Chart 3.7

Distribution of average debt across fields of study at the bachelor level and proportion of graduates within each field with large debt loads



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Interestingly from Chart 3.7, graduates from Business, management and public administration not only had the lowest average debt but also the lowest proportion of graduates with large debt loads. Health, parks, recreation and fitness – a field that included Medicine – had the highest average debt load ($23,600) and also had the highest proportion with large debt loads (39%).

Understanding the distribution of student debt: Small, Medium, and Large debt loads

The amount of debt that students undertake for postsecondary education can vary by the level of education, the province in which the educational institution was located, and duration of time spent in the degree. For the purpose of the report, three levels of debt were used: small debt – under $10,000, medium debt – $10,000 to $24,999, and large debt – $25,000 or more.

Those with higher levels of debt at graduation were less likely to pay it off in two years. Graduates from a bachelor degree who were still paying down their debt two years after they graduated were over two times more likely to have had large government debt ($25,000 or more). The results were paralleled at the master and doctorate levels.

Comparing graduates across cohorts, the proportion with a large debt load at graduation remained virtually unchanged. There was one exception, however: doctorate graduates of 2005 were more likely to have large debt loads than their 2000 counterparts. Table 3.5 partitions graduates with a government debt into two categories: 1) those that were still repaying their student debt two years after graduation and 2) those that were finished repaying their government student loans. Considering just graduates who were still paying off their government debt two years after graduation, few differences in proportions with large debt were found across cohorts, except at the doctorate level (32% had a large debt at graduation in 2000 compared to 40% in 2005). Although the proportion of graduates with large debt at graduation was similar for master graduates and higher for doctorate graduates from the 2005 cohort, more master and doctorate graduates had paid off their loans two years after graduation compared to the 2000 cohort.

Table 3.5

Proportion of graduates with large government debt at graduation for those who were still paying two years later and those who were not, by level of study

	Proportion of graduates with large government debt for those owing at graduation		Proportion of graduates with large government debt for those who had debt remaining two years after graduation		Proportion of graduates with large government debt for those without debt two years after graduation	
	Class of 2000	Class of 2005	Class of 2000	Class of 2005	Class of 2000	Class of 2005
	percent	percent	percent	percent	percent	percent
College	12	12	14	14	F	F
Bachelor	31	32	35	38	18	16
Master	26	27	32	32	10	17
Doctorate	27	35	32	40	15	24

F too unreliable to be published

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

Source: Statistics Canada, National Graduates Survey (Classes of 2000 and 2005).

On average, graduates that were still paying off their government debt two years after graduation earned less than graduates that had completely paid off their student loans

Overall, higher average earned income in 2006 was associated with higher levels of education for both those that had paid off their debt and those that were still paying. Interestingly, the earned income in 2006 was larger at each education level for graduates who managed to pay off their government-financed student debt relative to those who were in the midst of paying it off. Bachelor graduates who had paid off their debt earned over $8,000 dollars more – or roughly 23% more – than their counterparts that had debt two years after graduation. Similar results were found for college (7%), master (27%), and doctorate (7%) graduates.

Employment rates did not differ between the two groups of graduates (who had and had not paid off their student debt) at the college and bachelor levels but there were somewhat large differences at the master and doctorate levels. Master graduates who had paid off their government debt had an employment rate that was 6 percentage points higher while doctorate graduates had an employment rate 3 percentage points higher.

Comparisons between the 2005 and 2000 graduating classes show that, overall, average earned income (in 2007 constant dollars) differed at the bachelor and doctorate levels across cohorts: bachelors of 2005 who had government debt at graduation earned roughly $2,500 more than similarly defined graduates of 2000. Doctorates with a government related student debt at graduation earned roughly $9,500 dollars less (in 2007 constant dollars). Separating graduates into those with debt paid off and those still owing, certain 2005 graduates fared better than graduates of 2000, while others did worse. Bachelor graduates who accumulated debt during their degree and were without debt two years later (class of 2005) earned 12% more on average than similar bachelor graduates of 2000. On the other hand, 2005 college and doctorate graduates earned 10% and 14%, respectively, less than college and doctorate graduates of 2000.

In terms of graduates still paying off debt two years after graduation, only doctorate graduates from 2005 differed from their 2000 counterparts: they earned about $9,000 less or 85% of what the 2000 graduates earned. There was little that separated the cohorts in terms of employment rates.

About one in four graduates with government debt at graduation in 2005 reported difficulty in repaying their loans

Table 3.6 shows that graduates with government debt at graduation experienced hardship in repaying their loans at every level of education. The proportion of graduates that reported difficulties varied from a high of 29% at the college level to 23% of master graduates. Interestingly, even those that paid off their government-financed student debt reported payment difficulties: 13% among college graduates, 11% of bachelor, 16% at the master level, and 17% of doctorate. However, those still repaying their debt two years after graduation, at every level, were substantially more likely to report difficulties paying. It would be interesting to investigate why graduates have difficulties repaying their student debt. For example, are graduates having difficulties repaying the debt they incurred from their studies because they have taken other types of debt that pertain to life in general such as credit cards, mortgage payments, car loans or private loans?

Table 3.6

Proportion of graduates reporting difficulty repaying their government student debt for those who were still paying two years after graduation and those who were not, by level of study

	All graduates	Graduates with debt remaining two years after graduation	Graduates without debt two years after graduation
	percent	percent	percent
College	29	33	13 [E]
Bachelor	26	32	11
Master	23	27	16
Doctorate	25	28	17

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Calculation of debt repayment

The analysis of debt repayment was based on two guiding principles: 1) intra-cohort comparisons (between graduates of a specific year); and 2) inter-cohort comparisons (between similar graduates across graduating years). Comparisons of debt can prove to be difficult: do we compare constant dollars (adjusted for inflation) at some base year, or current dollars for the year in which the debt was reported? In this report, comparisons of debt across graduating classes used a constant 2007 base dollar. Conversely, for the reason outlined in the following paragraph, comparisons of debt within classes did not use an inflation adjustment.

The rationale for not using an inflation adjustment for within-cohort comparisons followed from Allen and Vaillancourt (2004) and can be illustrated with an example: respondents could have appeared to have paid off debt despite not doing so. If a respondent owed $1,000 at graduation and $1,000 two years later, converting the debt two years later to a constant base of the graduation year with a 3% inflation rate would suggest that the respondent paid off about 5% (($943 - $1,000) / $1,000) of their debt, when in fact they did not.

Finding similarities and contrasts across cohorts (2005 class relative to 2000 class) revealed that a higher incidence of reported difficulties in debt repayment was linked to lower levels of education for both 2005 and 2000 graduates with debt at graduation: it was highest among college graduates and lowest among master (lowest among doctorate in 2000).

In terms of contrasts across cohorts, there were minor differences in repayment difficulties at each level of education, however doctorate graduates of 2005 with debt were more likely to report difficulties repaying their debt compared to their peers of 2000 (a 7 percentage point difference). Finally, looking at repayment difficulties of graduates who had paid off their debt completely revealed that the recent cohort (2005) was more likely to report difficulties than their predecessors.

3.3 Profile of the size of student debt at graduation

Student debt of $25,000 or more was classified as large, as accumulation of debt of this size represents a substantial financial burden for most graduates. But what about graduates who have managed to keep their government student debt at lower levels? For example, what is the distribution of graduates with small, medium or large debt? Does this distribution differ across levels of education? This section profiles graduates in terms of average debt, earned income, and difficulties repaying their debt across the different levels of education.

College graduates had the highest proportion with small debt (under $10,000)

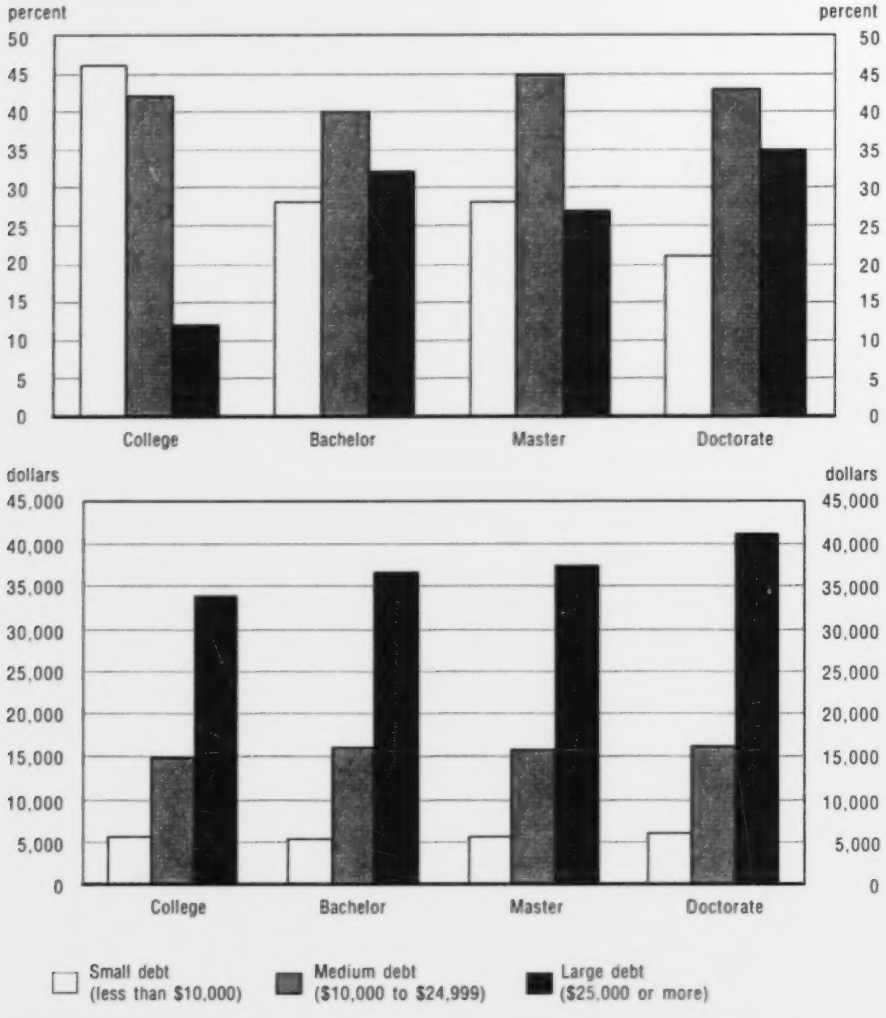
A larger proportion of college graduates who owed money to government student loans at graduation (46%) finished their studies with relatively small debts, compared to graduates at the bachelor (28%), master (28%), and doctorate (21%) levels. However, the average debt level of college graduates with a small debt load at graduation was not different than other graduates at the bachelor, master, and doctorate levels. In other words, those that had small debt upon graduating had roughly the same average debt load across all levels of education.

Directly linked to the classification of debt sizes were the number of graduates that were debt-free[10] two years after graduating. Bachelor graduates with small debt were the most likely to have their debt paid off – 53% had their small debt paid off – while college graduates were the least likely – 30% paid off their small debt two years after graduating.

Not surprisingly, graduates with large debt loads at all levels of education were the least likely to have their debt paid off two years after graduating.

Chart 3.8

Distribution of debt size and average amount of government debt, by level of study



Source: Statistics Canada, National Graduates Survey (Class of 2005).

Doctorate graduates not only had the highest proportion with large debt, but those with large debt had the highest average debt load

Chart 3.8 also reveals that doctorate graduates who had a large debt load (35%) had an average government debt over $41,000. Finally, the proportion of graduates with medium sized ($10,000 to $24,999) debt was highest amongst master graduates (45%) but was not considerably higher than observed at the bachelor (40%), college (42%) or doctorate levels (43%).

Graduates with large debt, and to some extent those with medium sized debt, reported difficulties repaying their loans

At each level of education, there were a number of graduates who reported difficulties repaying their debt. The largest proportions of graduates with difficulties were found at the large and medium debt categories. Specifically, about 45% of graduates with large debt and over a quarter of graduates with medium sized debt reported difficulties. At the lowest debt category, about 14% of graduates reported difficulties repaying their government student loans.

Taking each level of education separately, college graduates were the most likely to report difficulties repaying at each level of debt. Table 3.7 shows the proportion of graduates who reported difficulties repaying their government student loans by level of study.

Table 3.7

Proportion of 2005 graduates who reported difficulties repaying their government student loans, by size of debt and level of study

	Small	Medium	Large
	Less than $10,000	$10,000 to $24,999	$25,000 or more
	percent	percent	percent
College	17	34	59
Bachelor	12	22	43
Master	8 [E]	22	41
Doctorate	12	22	36

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Interpretation of debt service ratios

Debt service ratios are crude monetary measures of financial burden – or ability to pay - and are expressed in percentage terms. They are calculated as the ratio of debt payments to earned income during a particular time frame and are interpreted as the percentage of income devoted to debt repayments. Debt service ratios can be high for a number of reasons, which include involuntary low income or voluntary high payments.

While far from conclusive, a number of American studies on student debt burdens have often used 8% as a benchmark: graduates beyond this threshold are thought to have debt that is difficult to manage. In the Canadian context, graduates with trouble managing student debt could utilize the Revision of Terms feature: it provides the borrower with the flexibility to manage their loan repayment in a way that is responsive to their situation. It can be used as a debt management measure designed to decrease monthly payments – and burden. Conversely, it can be used to pay off debt faster through negotiated increases in loan payments.

Directly related to income is the average amount paid towards student debt in a given year (see textbox on Interpretation of debt service ratios). Graduates who are no longer in school are required to start paying back their government student loans, usually on terms set from the onset of the agreement. The amount that is paid in any given year reflects the size of the debt, the interest rate, earnings and the length of time over which the loan is to be paid back. As a proxy for determining debt burden, debt-servicing ratios were used[11]. While this is a somewhat crude measure, a number of studies have established benchmarks on debt-service ratios to gauge the extent of the financial burden. To put debt-servicing ratios into perspective, a number of studies in the literature have used an 8% benchmark to denote a high debt burden; however, it should be noted that Baum and Schwartz (2006) concluded that an affordable debt-servicing-ratio should be based on income that takes into account family size[12]. To see this point, consider three situations: a single individual earning $25,000 annually, a family of 5 earning $25,000 annually, and a family of 3 earning $150,000 annually. In each of these three cases, applying the 8% benchmark denoting high debt burden would be very different. In the second case, it could be argued that no payments should be made while in the last case, 8% would not reflect a burden at all.

For the purpose of this report, family size was not taken into account and thus interpreting debt service ratios should bear this in mind. Finally, debt-servicing ratios were ranked in ascending order from which the debt ratio at the 25th percentile, the median, and finally the 75th percentile was determined.

A quarter of bachelor graduates with large government debt loads had debt-servicing ratios at or above 15%

Bachelor graduates with large debt loads at graduation – $25,000 or more – had the highest debt ratio at the 75th percentile, with 15%. That is, after theoretically repaying their government student debt, 85% of their gross earned income was left for all other debts, costs of living, and other related expenses. Similar proportions were found for college graduates with large government debt loads (14% ratio), master (13%) and finally, doctorate graduates (11%). Not surprisingly, at lower categories of debt, the debt ratios were substantially lower. For example, at the medium debt category – $10,000 to $24,999 – the debt service ratio at the 75th percentile was 9% at the college level, 10% at the bachelor level, 7% at the master and finally 7% at the doctorate level. It should be noted, though, that this could be expected: having similar gross earned income but being in a higher debt category would raise the distribution of debt service ratios.

Summary

Section three showed that a number of graduates not only took on debt during their studies but also had accumulated debt of $25,000 or more. Moreover, graduates with debt to both a government and non-government source had the highest average debt loads. A descriptive analysis comparing the Class of 2000 to the Class of 2005 revealed that the composition of debt had changed: graduates from the Class of 2005 with debt were more likely to have owed to non-government sources and less likely to have owed to government sources at graduation. The analysis also revealed that a number of graduates who had either paid off or were still paying their debt load two years after graduation had difficulties repaying the loans. Finally, the proportion of graduates that reported difficulties in their loan repayment increased with government debt size.

Section 4

Other types of educational programs

For prospective students or even those that are already enrolled, postsecondary institutions offer a variety of educational programs providing unique opportunities to acquire different skills. Students wanting to acquire a balance between working experience and theory can apply to a co-operative education program, which is specifically designed for such purposes. Similarly, students that would like to experience the educational atmosphere of another country can search for institutions offering international student exchange programs. While other educational programs do exist in Canada (which will differ by educational level), the next section will focus on these two types of educational programs: co-operative education and international studies, their relationship to earnings, and finally to student debt.

4.1 Co-operative education

A larger proportion of college graduates took a co-operative program compared to bachelor graduates

College graduates were over two times more likely to have gained work experience through a co-op program than bachelor graduates. Nearly a quarter of college graduates who did not pursue further education – or 18,300 individuals – mixed work and school in a formal manner. However, despite the benefits that could possibly accrue, graduates from a co-op program at the college level had similar earnings on average and similar employment rates relative to graduates that did not enroll in such a program.

On the other hand, roughly one in eight bachelor graduates had taken a co-op program. Bachelor graduates from these programs earned more, on average, had higher employment and full-time employment rates, and lower incidence of unemployment.

Co-operative education

Students enrolled in a co-operative education program are, most often, part of a planned learning structure that integrates classroom theory and workplace experience. The work terms enable students to apply and refine the knowledge and skills acquired from related course curriculum as well as accumulate relevant work experience. These programs take longer, on average, and generally cost more: students are often required to travel for employment and incur additional accommodation expenses. Students participating in a co-operative program do so for relevant work experience, for developing a network of contacts, and for earning money while studying. While there are a number of benefits that accrue to students, employers and educational institutions get skilled labor at lower wages, are able to assess future employees, and build synergies with each other.

There were little to no differences between co-op and non co-op program graduates in terms of average debt at graduation, proportion with debt to any source, and average debt remaining two years after graduation

Many students choose to participate in a co-operative educational program because of the work experience gained, the potential money they can earn, as well as establishing a rapport with future employers. At the bachelor level, there appeared to be a stronger monetary benefit for participating in such a program: the 2007 earnings distribution was higher at the 25th percentile and median (50th) for those in such a program relative to those that did not take a co-operative program. The higher earnings distribution may suggest that starting salaries were higher for co-operative graduates or that the earnings profile of co-operative graduates varied less relative to non-cooperative graduates. While it would be interesting to investigate this issue across the fields of study to ascertain whether particular fields were driving these differences, such an analysis would suffer from low sample sizes.

For college graduates who participated in a program mixing work and classroom theory, the monetary gain was not apparent. One explanation for such findings may be due to the very nature of the college experience. The college category encompassed some programs that were traditionally work-related in nature (trade programs), thus there may be little variation in the earnings distribution across fields of study with and without a co-operative component. Similar results were found with employment rates (see Table A.12 in appendix).

Table 4.1

Estimated gross annual earnings of 2005 graduates working full-time in 2007, for graduates of co-op versus non co-op programs, by level of study

	College		Bachelor	
	Co-op programs	Non co-op programs	Co-op programs	Non co-op programs
	dollars	dollars	dollars	dollars
25th percentile	28,500	27,000	41,000	35,000
Median	35,600	34,800	49,000	44,100
75th percentile	45,000	44,200	57,000	55,000

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All amounts are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

While there was little to no variation on three of the four indicators of debt, the proportion of bachelor co-op graduates that paid off their debt completely two years after graduating was 9 percentage points higher than bachelor graduates without a co-op experience. Without further analysis, it would be speculative to link the higher proportion of those paying off debt among co-op graduates to their higher relative average earnings. The next table shows four indicators on total student debt for college and bachelor graduates from a co-op program vis-à-vis those not from a co-op program.

Table 4.2

Student debt from all sources for 2005 graduates of co-op versus non co-op programs, by level of study

		College		Bachelor	
		Co-op programs	Non co-op programs	Co-op programs	Non co-op programs
Percentage of graduates who owed student debt to any source	percent	45	46	55	54
Average debt owed to all sources at time of graduation	dollars	14,400	13,200	21,200	23,000
Percentage of graduates with debt who had paid it off two years after graduation	percent	22	24	36	27
Average debt remaining two years after graduation for those who still owed	dollars	13,100	11,400	20,700	20,400

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All amounts are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

4.2 International studies

Not only can prospective students enroll in programs that offer them a mixture of work and study, but they can also enroll in programs that mix domestic and international study terms. These programs, referred to as international studies, usually require that the student complete one or more study terms in a different country. For the purpose of this report, a graduate was indicated to have taken a component of their studies outside of Canada if the duration of such an experience was at least four weeks.

Roughly 4% of university graduates in 2005 took a component of their education outside of Canada

Almost 10% of doctorate graduates had studied outside of Canada's border at one point in their program, which was higher than the proportions found at the master (3%) and bachelor (4%) levels. These doctorate graduates, though, appeared to be somewhat disadvantaged in the labour market: they had lower full-time employment than other doctorate graduates with no international student experiences. On the other hand, master graduates who took part of their program outside of Canada had a higher full-time employment rate compared to those who did not. Differences in employment and unemployment rates were small at the bachelor level. Table 4.3 shows some labour force characteristics of graduates that had taken a component of their program outside of Canada.

Table 4.3

Labour force activity in 2007 of 2005 graduates, by whether or not a component of the program was taken outside of Canada and by level of study

	Bachelor		Master		Doctorate	
	Component of program taken outside of Canada	No component of program taken outside of Canada	Component of program taken outside of Canada	No component of program taken outside of Canada	Component of program taken outside of Canada	No component of program taken outside of Canada
	percent	percent	percent	percent	percent	percent
Employed	92	91	97	93	89	91
Employed full-time	86	84	92	86	80	84
Employed part-time	F	7	F	7	8	7
Out of the labour force	4 E	4	x	3 E	5	3
Unemployment rate	5 E	5	F	4	6	6

E use with caution

F too unreliable to be published

x suppressed to meet the confidentiality requirements of the *Statistics Act*

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

Graduates who did not report their hours of work were excluded from the denominator in the calculation of full-time and part-ti me employment rates.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

Components outside of Canada include only those with a duration of at least four weeks.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

In terms of earnings, very little separated graduates who had taken a component of their education outside of Canada with those that did not

At the bachelor, master and doctorate levels, there was little that separated graduates, in terms of earnings, from programs that incorporated academic experience outside of Canada and those that did not. As Table 4.4 shows, graduates with and without international study experience did not differ substantially at each quartile of the annual 2007 earnings.

Table 4.4

Estimated gross annual earnings for 2005 graduates working full-time in 2007, by whether or not a component of the program was taken outside of Canada and by level of study

	Bachelor		Master		Doctorate	
	Component of program taken outside of Canada	No component of program taken outside of Canada	Component of program taken outside of Canada	No component of program taken outside of Canada	Component of program taken outside of Canada	No component of program taken outside of Canada
	dollars	dollars	dollars	dollars	dollars	dollars
25th percentile	32,800	36,000	49,100	46,800	48,000	48,000
Median	44,000	45,000	60,000	60,000	62,000	65,000
75th percentile	56,000	55,000	73,000	78,000	75,000	79,600

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

All amounts are rounded to the nearest 100.

Components outside of Canada include only those with a duration of at least four weeks.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

For graduates who had taken a component of their education outside of Canada, accumulating student debt from any source was relatively common. Graduates at the bachelor level that had taken some portion of their program outside of Canada were slightly more likely to have graduated with some debt than those without such an experience. This was the case for doctorates as well. However, graduates at the master level with this type of educational program were substantially more likely to have debt at graduation than those not part of a similar program; 62% of master graduates with such a component had debt owed to any source at graduation, compared to 46% of master graduates without a portion of their program taken outside of Canada.

Table 4.5

Student debt from all sources for 2005 graduates, by whether or not a component of the program was taken outside of Canada and by level of study

		Bachelor		Master		Doctorate	
		Component of program taken outside of Canada	No component of program taken outside of Canada	Component of program taken outside of Canada	No component of program taken outside of Canada	Component of program taken outside of Canada	No component of program taken outside of Canada
Percentage of graduates who owed student debt to any source	percent	57	54	62	46	46	43
Average debt owed to all sources at time of graduation	dollars	23,300	22,800	23,900	22,800	27,400	25,400
Percentage of graduates with debt who had paid it off two years after graduation	percent	34	28	42 [E]	32	24	31
Average debt remaining two years after graduation for those who still owed	dollars	21,800	20,300	19,700	19,500	24,000	22,300

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All amounts are rounded to the nearest 100.
Components outside of Canada include only those with a duration of at least four weeks.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Graduates with an international component and student related debt were also more likely to have paid off their debt two years later at the bachelor and master level. Specifically, there was a 10 percentage point gap at the master level and a 6 percentage point difference at the bachelor level. On the other hand, doctorate graduates with debt at graduation and a component outside of Canada were less likely to have paid off their debt two years later compared to doctorate graduates without an international student experience.

Summary

Section four showed that although the anecdotal benefits of undertaking a co-operative educational program are generally positive, graduates at the college level with co-operative experience were no more likely to excel on the labour market two years after graduation relative to graduates without such an experience. However at the bachelor level, graduates with co-operative experience were earning more, had higher employment and full-time employment rates, and were more likely to have reported their debt paid off two years after graduation. The descriptive analysis on graduates who had taken a component of their studies outside of Canada revealed that very little separated them, in terms of earnings, from graduates without such an experience. However, it was shown that master graduates with international experience were more likely to have owed debt at graduation but also more likely to be working full-time and to have paid off their debt two years after graduating.

Conclusion

With over 300,000 graduates of 2005 being represented by the National Graduates Survey, educational and labour market pathways were analyzed for the graduating class of 2005 and compared with the previous NGS graduating class of 2000. This enabled an overall analysis of employment patterns, unemployment levels, earnings, use of student loans, level of debt and further education. It also provided information about graduates who undertook co-operative education or education outside of Canada as part of their program.

Females from the Class of 2005 made up the majority of graduates at the college, bachelor and master levels and their proportion increased slightly across all levels except for the master level compared to the Class of 2000. Males continued to dominate in historically male-dominated fields of study such as Mathematics, computer and information sciences and Architecture, engineering and related technologies. Conversely, the proportions of females in traditionally female-dominated fields such as Nursing and Social and behavioural sciences have increased.

Although labour market conditions appeared to be fairly strong at the time 2005 graduates entered the labour market, higher proportions of them went back to school for further education compared to the graduating class of 2000. Moreover, almost one-fifth of 2005 bachelor graduates had previously completed university studies, resulting in a number of "lateral" movements within the postsecondary education system, and prolonging their time spent on higher education.

Labour market outcomes of graduates within fields of study, in terms of earnings and employment, improved as educational attainment rose. Furthermore, compared to 2000 graduates, 2005 graduates had higher earnings (in constant dollars). These higher earnings may suggest that 2005 graduates working full-time in 2007 had better labour market matches to their credentials, or that the wages paid in jobs available to individuals with a postsecondary credential rose since 2002. Despite higher earnings among 2005 graduates, there remained a gender earnings gap. Additionally, the distribution of earnings varied greatly across fields of study.

Students financed their education in diverse ways. About half of the 2005 graduates relied on either government or non-government student loans. The proportion of 2000 and 2005 graduates owing to both types of loans was roughly similar. However, graduates of 2005 were more likely to owe solely to non-government sources, and less likely to owe exclusively to government sources. Additionally, graduates of 2005 who owed only to non-government sources had higher average debt levels compared to graduates of 2000. The opposite was true for those owing to government sources only: they had lower average debt levels compared to graduates of 2000. More importantly, graduates had higher average debt if they owed to both sources. These findings may indicate that the attractiveness of loans from the two sources has changed, which merits further investigation. With a

third of master graduates and over a quarter of bachelor graduates, a higher proportion of graduates of 2005 than 2000 had paid off their debt two years after graduation (to all sources). A quarter of all 2005 graduates reported difficulties repaying their government student debt. As expected, graduates with large debt loads were consistently more likely to report such difficulties.

At the bachelor level, participation in co-op programs is associated with more favourable labour market outcomes. Bachelor graduates with a co-operative educational experience had higher earnings, higher employment and full-time employment rates, and lower incidences of unemployment compared to graduates without such an experience. Moreover, bachelor graduates with co-operative experience were more likely to have paid off their debt (to any source) two years after graduation. However, graduates from a college co-op program had similar earnings and similar full-time employment rates compared to graduates without such experience. The value of co-operative education, which combines practical work experience with classroom learning, appeared to be recognized in the labour market for bachelor graduates and not college graduates two years after graduation.

Two years after graduation, the pay-offs from investments in postsecondary education varied by field of study. For example, at the bachelor level, graduates in Humanities had an average government debt load of just under $20,000, median earnings of $36,000 and a full-time employment rate of 75%. In contrast, graduates in Architecture, engineering and related technologies had an average government debt load of around $15,000, median earnings of $58,300 dollars and a full-time employment rate of 93%. This type of information provides insight into the employment and earnings potential of workers with specific types of postsecondary credentials as well as their capacity to borrow and pay back debt related to investments in their higher education.

Appendix

Table A.1
Profile of 2005 postsecondary graduates by level of study

		College	Bachelor	Master	Doctorate
Total number of graduates	**number**	**103,900**	**162,300**	**35,300**	**3,500**
Female	percent	58	63	56	46
Male	percent	42	37	44	54
Average age at time of graduation	years	26	26	32	35
Median age at time of graduation	years	23	24	29	33
Under age 25 at time of graduation	percent	61	62	14	x
Average duration of program if taken full-time	months	21	39	25	64
In secondary school 12 months prior to entering program	percent	32	40	...	...
Pursued further education after 2005 graduation	percent	31	42	30	8
Completed further education after 2005 graduation	percent	10	16	7	4

... not applicable
x suppressed to meet the confidentiality requirements of the *Statistics Act*
Note: Numbers of graduates are rounded to the nearest 100.
Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.2
Profile of 2005 graduates by level of study and field of study (major fields and selected minor fields)

	Total number of graduates	Female	Age at graduation			Pursued further education after 2005 graduation
			Average age	Median age	Under 25	
	number	percent	years	years	percent	percent
College						
Total	**103,900**	**58**	**26**	**23**	**62**	**31**
Education	2,800	90	29	24	52	25
Visual and performing arts, and communications technologies	7,700	59	24	22	76	36
Humanities	3,100	64	24	21	76	77
Social and behavioural sciences, and law	10,700	83	27	23	59	28
Communications, journalism, and related programs	2,600	56	24	22	72	26
Legal professions and studies	1,400	91	27	23	60	28 E
Business, management and public administration	26,500	68	27	23	58	34
Physical and life sciences, and technologies	1,100	56	26	23	58	34
Mathematics, computer and information sciences	5,200	26	26	23	60	31
Computer and information sciences and support services and related interdisciplinary fields	4,900	23	26	23	61	31
Architecture, engineering and related technologies	16,500	13	25	22	68	26
Engineering technologies / Technicians	9,800	13	25	23	66	30
Mechanic and repair technologies / Technicians	3,300	F	24	21	72	19 E
Agriculture, natural resources and conservation	2,200	42	25	22	69	23
Agriculture, agricultural operations, and related sciences	1,200	50	24	21	73	20
Natural resources and conservation	1,100	33	25	23	64	26
Health, parks, recreation and fitness	19,800	82	28	24	51	24
Nursing	6,500	92	29	27	42	28
Other health professions and related clinical sciences	11,900	80	27	24	53	19
Personal, protective and transportation services	7,900	38	24	21	76	35
Personal and culinary services	2,000	63	24	21	77	34
Security and protective services	5,500	31	24	22	76	37
Bachelor						
Total	**162,300**	**63**	**26**	**24**	**62**	**42**
Education	19,400	75	28	25	46	16
Visual and performing arts, and communications technologies	6,900	66	26	23	66	42
Humanities	15,800	63	26	23	65	55
Social and behavioural sciences, and law	35,000	73	26	23	67	53
Social sciences and related interdisciplinary fields	17,000	62	25	23	69	53
Psychology and related interdisciplinary fields	8,100	85	25	23	72	63
Legal professions and studies	3,400	63	28	25	34	43
Business, management and public administration	30,300	59	28	24	54	38
Physical and life sciences, and technologies	11,700	64	23	22	86	69
Mathematics, computer and information sciences	7,300	24	25	24	66	32
Mathematics and statistics and related interdisciplinary fields	1,700	43	24	23	79	55
Computer and information sciences and support services and related interdisciplinary fields	5,600	18	26	24	62	26
Architecture, engineering and related technologies	12,700	26	25	23	73	31
Architecture and related services and related interdisciplinary studies	900	55	25	24	65	65
Engineering	10,800	22	24	23	77	28
Agriculture, natural resources and conservation	2,200	53	25	23	66	37
Agriculture, agricultural operations, and related sciences	900	55	26	24	63	36
Natural resources and conservation	1,300	52	25	23	68	37
Health, parks, recreation and fitness	18,500	79	27	24	56	36
Medicine	1,400	72	27	26	27 E	39 E
Nursing	6,900	94	29	25	46	24
Other health professions and related clinical sciences	5,800	77	26	24	57	33
Parks, recreation, leisure and fitness studies	4,400	59	24	23	81	57
Personal, protective and transportation services	1,000	47	26	23	70	36

Table A.2 (concluded)

Profile of 2005 graduates by level of study and field of study (major fields and selected minor fields)

	Total number of graduates	Female	Age at graduation			Pursued further education after 2005 graduation
			Average age	Median age	Under 25	
	number	percent	years	years	percent	percent
Master						
Total	**35,300**	**56**	**32**	**29**	**14**	**30**
Education	4,500	73	38	37	6 E	18
Visual and performing arts, and communications technologies	800	59	31	27	20	32
Humanities	2,900	59	32	28	22	45
Social and behavioural sciences, and law	4,700	67	30	27	18	38
Business, management and public administration	9,800	49	33	31	12	24
Physical and life sciences, and technologies	2,300	59	28	26	17	46
Mathematics, computer and information sciences	2,000	39	31	28	17	30
Mathematics and statistics and related interdisciplinary fields	400	43	29	27	24 E	48
Computer and information sciences and support services and related interdisciplinary fields	1,200	26	31	29	17 E	31
Library science	400	74	31	28	11 E	F
Architecture, engineering and related technologies	4,100	30	30	28	10	27
Architecture and related services and related interdisciplinary studies	700	64	28	28	13 E	23 E
Engineering	3,200	22	30	28	10	28
Agriculture, natural resources and conservation	900	52	30	27	12	27
Agriculture, agricultural operations, and related sciences	300	47	30	27	12 E	26
Natural resources and conservation	600	54	30	27	11	27
Health, parks, recreation and fitness	3,100	76	31	28	17	27
Other health professions and related clinical sciences	2,000	75	30	27	18	20
Parks, recreation, leisure and fitness studies	300	57	28	26	28 E	40
Personal, protective and transportation services	100	30	35	35	16 E	34
Doctorate						
Total	**3,500**	**46**	**35**	**33**	**x**	**8**
Education	300	65	45	45	x	4 E
Visual and performing arts, and communications technologies	100	52	37	35	x	x
Humanities	300	47	37	34	x	10
Social and behavioural sciences, and law	700	63	36	33	x	6
Business, management and public administration	100	40	39	38	x	8 E
Physical and life sciences, and technologies	900	40	31	30	x	11
Mathematics, computer and information sciences	200	28	33	31	x	x
Architecture, engineering and related technologies	500	18	34	33	x	8
Engineering	500	17	34	33	x	8
Agriculture, natural resources and conservation	100	42	35	33	x	x
Health, parks, recreation and fitness	300	61	36	35	x	15
Other health professions and related clinical sciences	200	56	35	34	x	13
Personal, protective and transportation services	x	x	x	x	x	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

E use with caution

F too unreliable to be published

Note: Numbers of graduates are rounded to the nearest 100.

The sum of graduates by major field of study may not add up to the total number of graduates due to the fact that the field of study could not be coded for some graduates.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.3

Labour force activity of 2005 graduates in 2007 by gender and level of study

		College	Bachelor	Master	Doctorate
All graduates					
Number of graduates	number	71,800	94,800	24,800	3,200
Employed	percent	90	91	93	91
Employed full-time	percent	80	84	86	84
Employed part-time	percent	10	7	7	7
Out of the labour force	percent	4	4	3	3
Unemployment rate	percent	6	5	4	6
Male					
Number of graduates	number	29,700	36,300	10,400	1,700
Employed	percent	91	92	94	91
Employed full-time	percent	87	88	90	87
Employed part-time	percent	5	4	4	4
Out of the labour force	percent	3 [E]	3 [E]	2 [E]	2
Unemployment rate	percent	6	5	4	7
Female					
Number of graduates	number	42,100	58,600	14,400	1,500
Employed	percent	90	90	92	91
Employed full-time	percent	75	81	84	80
Employed part-time	percent	14	8	8	10
Out of the labour force	percent	4	5	4 [E]	5
Unemployment rate	percent	6	6	4	5

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table, as are graduates for whom a l abour force status could not be calculated.

Graduates who did not report their hours of work were excluded from the denominator in the calculation of full-time and part-ti me employment rates.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

Numbers of graduates are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.4

Labour force activity of 2005 graduates in 2007 by level of study and field of study (major field of study and selected minor fields)

	Total number of graduates	Employment rate			Unemployment rate	Out of the labour force
		Full-time	Part-time	Total		
	number	percent	percent	percent	percent	percent
College						
Total	**71,800**	**80**	**10**	**90**	**6**	**4**
Education	2,100	61	26	87	8 E	6 E
Visual and performing arts, and communications technologies	5,000	77	14	91	5 E	4 E
Humanities	700	69	16 E	85	F	11 E
Social and behavioural sciences, and law	7,700	81	9	90	5 E	5 E
Communications, journalism, and related programs	1,900	79	10 E	89	F	F
Legal professions and studies	1,000	86	F	91	F	F
Business, management and public administration	17,600	81	7 E	89	8 E	4 E
Physical and life sciences, and technologies	700	84	5 E	89	7 E	5 E
Mathematics, computer and information sciences	3,600	83	6 E	89	7 E	5 E
Computer and information sciences and support services and related interdisciplinary fields	3,300	84	4 E	88	7 E	5 E
Architecture, engineering and related technologies	12,100	86	F	89	8 E	3 E
Engineering technologies / Technicians	6,800	86	F	89	7 E	F
Mechanic and repair technologies / Technicians	2,700	89	x	89	9 E	F
Agriculture, natural resources and conservation	1,700	87	3 E	91	5 E	4 E
Agriculture, agricultural operations, and related sciences	900	87	5 E	92	3 E	4 E
Natural resources and conservation	800	87	x	89	7 E	4 E
Health, parks, recreation and fitness	15,100	73	21	94	4 E	2 E
Nursing	4,700	72	24	96	F	F
Other health professions and related clinical sciences	9,600	73	20	93	5 E	2 E
Personal, protective and transportation services	5,100	88	6 E	94	4 E	3 E
Personal and culinary services	1,300	86	6 E	92	7 E	2 E
Security and protective services	3,500	89	F	95	F	F
Bachelor						
Total	**94,800**	**84**	**7**	**91**	**5**	**4**
Education	16,400	77	12	89	8	3 E
Visual and performing arts, and communications technologies	4,000	71	17	88	6 E	7 E
Humanities	7,100	75	12 E	87	4 E	9 E
Social and behavioural sciences, and law	16,600	83	5 E	89	7 E	5 E
Social sciences and related interdisciplinary fields	8,000	81	5 E	86	9 E	F
Psychology and related interdisciplinary fields	3,000	91	F	94	F	F
Legal professions and studies	1,900	87	x	90	x	x
Business, management and public administration	18,700	91	3 E	93	4 E	3 E
Physical and life sciences, and technologies	3,600	83	5 E	88	7 E	5 E
Mathematics, computer and information sciences	4,900	89	2 E	92	6 E	3 E
Mathematics and statistics and related interdisciplinary fields	800	85	F	89	x	x
Computer and information sciences and support services and related interdisciplinary fields	4,200	90	F	92	6 E	F
Architecture, engineering and related technologies	8,800	93	F	94	3 E	F
Architecture and related services and related interdisciplinary studies	300 E	56 E	x	68 E	x	x
Engineering	7,800	95	x	96	3 E	F
Agriculture, natural resources and conservation	1,400	91	3 E	94	3 E	3 E
Agriculture, agricultural operations, and related sciences	600	91	F	95	3 E	F
Natural resources and conservation	800	92	F	94	F	F
Health, parks, recreation and fitness	11,900	85	8	93	3 E	4 E
Medicine	800 E	91	x	92	x	F
Nursing	5,200	86	9 E	95	F	F
Other health professions and related clinical sciences	3,900	87	7 E	95	F	F
Parks, recreation, leisure and fitness studies	1,900	72	F	85	F	x
Personal, protective and transportation services	600	89	2 E	91	F	3 E

Table A.4 (concluded)

Labour force activity of 2005 graduates in 2007 by level of study and field of study (major field of study and selected minor fields)

	Total number of graduates	Employment rate			Unemployment rate	Out of the labour force
		Full-time	Part-time	Total		
	number	percent	percent	percent	percent	percent
Master						
Total	**24,800**	**86**	**7**	**93**	**4**	**3**
Education	3,600	87	8 E	95	5 E	F
Visual and performing arts, and communications technologies	500	56	30	86	8 E	7 E
Humanities	1,600	70	16 E	86	6 E	F
Social and behavioural sciences, and law	2,900	78	10	88	6 E	F
Business, management and public administration	7,400	92	F	95	3 E	2 E
Physical and life sciences, and technologies	1,200	88	4 E	92	5 E	3 E
Mathematics, computer and information sciences	1,400	87	5 E	92	4 E	F
Mathematics and statistics and related interdisciplinary fields	200	90	x	97	x	x
Computer and information sciences and support services and related interdisciplinary fields	900	89	F	91	5 E	F
Library science	400	81	9 E	91	F	F
Architecture, engineering and related technologies	3,000	91	F	94	4 E	2 E
Architecture and related services and related interdisciplinary studies	600	90	x	92	x	x
Engineering	2,300	92	F	94	4 E	F
Agriculture, natural resources and conservation	600	85	8 E	93	4 E	3 E
Agriculture, agricultural operations, and related sciences	200	90	4 E	94	x	x
Natural resources and conservation	400	83	10 E	93	4 E	4 E
Health, parks, recreation and fitness	2,200	87	8	95	3 E	2 E
Other health professions and related clinical sciences	1,600	87	8 E	95	3 E	F
Parks, recreation, leisure and fitness studies	200	84	F	92	x	x
Personal, protective and transportation services	100	89	x	93	x	x
Doctorate						
Total	**3,200**	**84**	**7**	**91**	**6**	**3**
Education	300	76	14	91	5 E	5 E
Visual and performing arts, and communications technologies	100	67	16 E	83	14 E	x
Humanities	300	67	11	80	15	6
Social and behavioural sciences, and law	700	80	12	93	5	2
Business, management and public administration	100	95	x	97	x	x
Physical and life sciences, and technologies	800	90	2	93	4	3
Mathematics, computer and information sciences	200	88	6 E	94	x	x
Architecture, engineering and related technologies	400	88	2 E	90	8	2 E
Engineering	400	88	2 E	90	8	2 E
Agriculture, natural resources and conservation	100	87	x	91	x	x
Health, parks, recreation and fitness	300	87	4 E	91	4 E	5 E
Other health professions and related clinical sciences	200	87	4 E	91	x	6 E
Personal, protective and transportation services	x	x	x	x	x	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

E use with caution

F too unreliable to be published

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table, as are graduates for whom a l abour force status could not be calculated.

Graduates who did not report their hours of work were excluded from the denominator in the calculation of full-time and part-ti me employment rates.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

The sum of graduates by major field of study may not add up to the total number of graduates due to the fact that the field of study could not be coded for some graduates.

Numbers of graduates are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.5

Estimated gross annual earnings of 2005 graduates working full-time in 2007, by gender and level of study

	College	Bachelor	Master	Doctorate
	dollars	dollars	dollars	dollars
All graduates				
25th percentile	27,500	35,900	46,800	48,000
Median	35,000	45,000	60,000	65,000
75th percentile	44,300	55,000	77,900	78,000
Male				
25th percentile	30,000	38,500	50,000	47,000
Median	38,400	48,000	65,000	65,000
75th percentile	50,000	60,000	85,000	80,000
Female				
25th percentile	26,000	34,000	45,000	49,400
Median	32,200	43,000	58,000	63,000
75th percentile	41,100	52,000	72,000	77,400

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.6

Estimated gross annual earnings of 2005 graduates working full-time in 2007, by level of study and field of study (major fields and selected minor fields)

	25th percentile	Median	75th percentile
	dollars	dollars	dollars
College			
Total	**27,500**	**35,000**	**44,300**
Education	25,200	31,700	39,200
Visual and performing arts, and communications technologies	23,400	30,000	37,200
Humanities	25,000 [E]	32,700	53,000 [E]
Social and behavioural sciences, and law	24,000	29,300	37,400
Communications, journalism, and related programs	25,500	34,200	43,000
Legal professions and studies	27,600	32,400	37,500
Business, management and public administration	27,000	33,300	43,000
Physical and life sciences, and technologies	30,000	35,900	45,600
Mathematics, computer and information sciences	29,100	36,000	45,000
Computer and information sciences and support services and related interdisciplinary fields	28,600	36,400	45,600
Architecture, engineering and related technologies	32,000	39,600	50,000
Engineering technologies / Technicians	34,000	41,600	50,000
Mechanic and repair technologies / Technicians	31,200	38,400	52,000
Agriculture, natural resources and conservation	26,400	37,000	48,000
Agriculture, agricultural operations, and related sciences	23,400	31,200	43,700
Natural resources and conservation	32,200	41,600	55,000
Health, parks, recreation and fitness	30,000	37,000	47,800
Nursing	33,800	40,000	46,500
Other health professons and related clinical sciences	28,100	35,100	49,100
Personal, protective and transportation services	26,000	34,000	45,000
Personal and culinary services	21,900	27,300	35,400
Security and protective services	28,800	35,000	45,800
Bachelor			
Total	**35,900**	**45,000**	**55,000**
Education	38,000	45,000	50,000
Visual and performing arts, and communications technologies	25,000	33,000	41,600
Humanities	27,000	36,000	48,000
Social and behavioural sciences, and law	31,200	40,000	50,000
Social sciences and related interdisciplinary fields	30,000	40,000	50,000
Psychology and related interdisciplinary fields	32,000	36,000	40,000
Legal professions and studies	48,000	65,000	93,500
Business, management and public administration	36,700	44,300	55,000
Physical and life sciences, and technologies	30,400	39,500	50,000
Mathematics, computer and information sciences	40,000	50,000	59,700
Mathematics and statistics and related interdisciplinary fields	36,200	46,400	52,500
Computer and information sciences and support services and related interdisciplinary fields	40,000	50,000	60,000
Architecture, engineering and related technologies	44,700	53,000	65,000
Architecture and related services and related interdisciplinary studies	32,800	34,300	45,400
Engineering	45,000	54,000	65,000
Agriculture, natural resources and conservation	35,900	44,200	54,000
Agriculture, agricultural operations, and related sciences	34,700	39,500	49,900
Natural resources and conservation	39,000	48,000	61,000
Health, parks, recreation and fitness	45,200	53,400	65,000
Medicine	48,000	52,000	55,000
Nursing	48,400	54,600	62,400
Other health professons and related clinical sciences	46,200	60,000	84,000
Parks, recreation, lesure and fitness studies	30,000	40,000	45,000
Personal, protective and transportation services	33,300	44,300	59,800

Table A.6 (concluded)

Estimated gross annual earnings of 2005 graduates working full-time in 2007, by level of study and field of study (major fields and selected minor fields)

	25th percentile	Median	75th percentile
	dollars	dollars	dollars
Master			
Total	**46,800**	**60,000**	**77,900**
Education	52,000	68,000	78,000
Visual and performing arts, and communications technologies	26,000	37,500	46,800
Humanities	33,600	45,500	58,000
Social and behavioural sciences, and law	40,000	50,000	65,000
Business, management and public administration	55,000	69,000	93,600
Physical and life sciences, and technologies	37,400	49,300	62,000
Mathematics, computer and information sciences	44,000	55,000	65,000
Mathematics and statistics and related interdisciplinary fields	48,000	57,000	64,500
Computer and information sciences and support services and related interdisciplinary fields	45,000	58,000	70,000
Library science	41,000	49,100	56,000
Architecture, engineering and related technologies	50,000	60,000	74,000
Architecture and related services and related interdisciplinary studies	40,000	49,000	59,000
Engineering	53,000	62,000	78,000
Agriculture, natural resources and conservation	40,000	50,000	62,400
Agriculture, agricultural operations, and related sciences	37,500	51,900	64,500
Natural resources and conservation	40,000	50,000	60,000
Health, parks, recreation and fitness	50,000	62,400	76,000
Other health professions and related clinical sciences	50,000	60,300	73,000
Parks, recreation, leisure and fitness studies	39,500	47,000	60,000
Personal, protective and transportation services	61,000	90,000	106,800
Doctorate			
Total	**48,000**	**65,000**	**78,000**
Education	68,000	78,000	98,000
Visual and performing arts, and communications technologies	x	69,000	x
Humanities	50,000	60,000	68,000
Social and behavioural sciences, and law	55,000	67,000	78,000
Business, management and public administration	77,000	90,000	108,000
Physical and life sciences, and technologies	40,000	49,400	67,000
Mathematics, computer and information sciences	55,000	65,000	78,000
Architecture, engineering and related technologies	57,000	70,000	85,000
Engineering	57,700	70,000	85,000
Agriculture, natural resources and conservation	45,000	60,000	70,000
Health, parks, recreation and fitness	53,000	70,000	82,000
Other health professions and related clinical sciences	45,200	67,000	87,100
Personal, protective and transportation services	x	x	x

x suppressed to meet the confidentiality requirements of the *Statistics Act*

E use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
All numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.7

Student debt from all sources for 2005 graduates, by level of study

		College	Bachelor	Master	Doctorate
Number of graduates	**number**	**71,800**	**94,800**	**24,800**	**3,200**
Graduates who owed money for their education to any source (government or non-government)					
Percentage of graduates who owed student debt to any source	percent	45	54	46	44
Average debt owed to all sources at time of graduation	dollars	13,600	22,800	22,800	25,600
Percentage of graduates with debt who had paid it off two years after graduation	percent	24	28	32	30
Average debt remaining two years after graduation for those who still owed	dollars	11,800	20,400	19,500	22,500
Graduates who owed student debt to government student loan programs					
Percentage of graduates who owed government student loans	percent	34	43	34	34
Average debt owed to government student loans at time of graduation	dollars	12,700	19,600	19,000	22,900
Percentage of graduates with debt who had paid it off two years after graduation	percent	19	28	32	30
Average debt remaining two years after graduation for those who still owed	dollars	10,900	16,900	15,800	19,700
Graduates who owed money to non-government sources for their education					
Percentage of graduates who owed non-government student debt	percent	20	26	23	20
Average debt owed to non-government sources at time of graduation	dollars	9,000	14,600	18,400	17,300
Percentage of graduates with debt who had paid it off two years after graduation	percent	38	38	37	36
Average debt remaining two years after graduation for those who still owed	dollars	9,100	16,200	17,500	17,200
Graduates who owed only government student loan programs					
Percentage of graduates who owed only government student loans	percent	25	27	24	24
Average debt owed to government student loan programs at time of graduation	dollars	12,300	18,200	17,900	21,600
Percentage of graduates with debt who had paid it off two years after graduation	percent	20	31	34	33
Average debt remaining two years after graduation for those who still owed	dollars	10,500	16,200	14,500	18,400
Graduates who owed only to non-government sources for their education					
Percentage of graduates who owed only non-government student debt	percent	11	11	12	10
Average debt owed to non-government sources at time of graduation	dollars	9,300	14,100	20,100	16,800
Percentage of graduates with debt who had paid it off two years after graduation	percent	41	45	41	42
Average debt remaining two years after graduation for those who still owed	dollars	9,200	15,700	18,200	15,300
Graduates who owed to both government and non-government sources for their education					
Percentage of graduates who owed both government and non-government student debt	percent	9	15	10	10
Average debt owed to both sources at time of graduation	dollars	22,600	37,000	37,800	43,700
Percentage of graduates with debt who had paid it off two years after graduation	percent	9 [E]	12	16	12
Average debt remaining two years after graduation for those who still owed	dollars	21,300	31,600	35,100	40,600

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.8

Profile of 2005 graduates who owed money to government student loans at graduation, by level of study

		Graduates with debt remaining two years after graduation	Graduates without debt two years after graduation	Total graduates owing at graduation
College				
Number of graduates	**number**	**17,800**	**4,700**	**22,500**
Average debt at graduation	dollars	14,000	8,500	12,800
Large debt at graduation – $25,000 and over	percent	14	F	12
Average debt two years after graduation	dollars	10,900	0	8,600
Large debt two years after graduation – $25,000 and over	percent	9	...	7
Percentage of debt paid off two years after graduation	percent	22	100	33
Reported difficulties repaying debt	percent	33	13 E	29
Employed in 2007	percent	90	90	90
Without income in 2006	percent	F	F	1 E
Average amount paid in 2006	dollars	1,600	...	...
Average income in 2006	dollars	30,000	32,100	30,500
Ratio of debt payments to income	ratio	5	...	...
Debt servicing ratio – 25th percentile	ratio	2	...	...
Debt servicing ratio – Median	ratio	4	...	...
Debt servicing ratio – 75th percentile	ratio	8	...	...
Average age at graduation	years	26	26	26
Median age at graduation	years	24	24	24
Married or living common-law	percent	38	43	39
With dependent children	percent	31	25	30
With previous postsecondary education	percent	52	57	53
Bachelor				
Number of graduates	**number**	**27,500**	**11,500**	**39,100**
Average debt at graduation	dollars	22,200	13,100	19,500
Large debt at graduation – $25,000 and over	percent	38	16	32
Average debt two years after graduation	dollars	16,900	0	11,900
Large debt two years after graduation – $25,000 and over	percent	22	...	16
Percentage of debt paid off two years after graduation	percent	24	100	39
Reported difficulties repaying debt	percent	32	11	26
Employed in 2007	percent	91	91	91
Without income in 2006	percent	F	F	F
Average amount paid in 2006	dollars	2,900	...	...
Average income in 2006	dollars	37,300	45,700	39,700
Ratio of debt payments to income	ratio	8	...	...
Debt servicing ratio – 25th percentile	ratio	3	...	...
Debt servicing ratio – Median	ratio	6	...	...
Debt servicing ratio – 75th percentile	ratio	11	...	...
Average age at graduation	years	26	26	26
Median age at graduation	years	24	24	24
Married or living common-law	percent	41	41	41
With dependent children	percent	19	18	19
With previous postsecondary education	percent	59	61	60

Table A.8 (concluded)

Profile of 2005 graduates who owed money to government student loans at graduation, by level of study

		Graduates with debt remaining two years after graduation	Graduates without debt two years after graduation	Total graduates owing at graduation
Master				
Number of graduates	**number**	**5,500**	**2,700**	**8,200**
Average debt at graduation	dollars	21,100	14,200	18,800
Large debt at graduation – $25,000 and over	percent	32	17	27
Average debt two years after graduation	dollars	15,800	0	10,600
Large debt two years after graduation – $25,000 and over	percent	20	...	14
Percentage of debt paid off two years after graduation	percent	25	100	44
Reported difficulties repaying debt	percent	27	16	23
Employed in 2007	percent	90	96	92
Without income in 2006	percent	F	x	F
Average amount paid in 2006	dollars	2,800	...	...
Average income in 2006	dollars	43,200	54,700	46,900
Ratio of debt payments to income	ratio	6	...	...
Debt servicing ratio – 25th percentile	ratio	2	...	...
Debt servicing ratio – Median	ratio	5	...	...
Debt servicing ratio – 75th percentile	ratio	9	...	...
Average age at graduation	years	29	29	29
Median age at graduation	years	27	28	27
Married or living common-law	percent	56	56	56
With dependent children	percent	28	30	28
With previous postsecondary education	percent	98	98	98
Doctorate				
Number of graduates	**number**	**700**	**300**	**1,100**
Average debt at graduation	dollars	25,300	17,300	22,900
Large debt at graduation – $25,000 and over	percent	40	24	35
Average debt two years after graduation	dollars	19,700	0	13,700
Large debt two years after graduation – $25,000 and over	percent	27	...	19
Percentage of debt paid off two years after graduation	percent	22	100	40
Reported difficulties repaying debt	percent	28	17	25
Employed in 2007	percent	90	93	91
Without income in 2006	percent	1 [E]	x	1 [E]
Average amount paid in 2006	dollars	3,400	...	...
Average income in 2006	dollars	53,900	57,500	55,000
Ratio of debt payments to income	ratio	6	...	...
Debt servicing ratio – 25th percentile	ratio	3	...	...
Debt servicing ratio – Median	ratio	5	...	...
Debt servicing ratio – 75th percentile	ratio	8	...	...
Average age at graduation	years	34	34	34
Median age at graduation	years	32	33	32
Married or living common-law	percent	70	76	72
With dependent children	percent	44	54	47
With previous postsecondary education	percent	100	100	100

... not applicable
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x suppressed to meet the confidentiality requirements of the *Statistics Act*
[E] use with caution
F too unreliable to be published

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.9

Profile of 2005 graduates who owed money to government student loans at graduation, by level of study and size of debt

		Small	Medium	Large
		Less than $10,000	$10,000 to $24,999	$25,000 and over
College				
Number of graduates	**number**	**10,400**	**9,300**	**2,700**
Percentage of graduates with debt	percent	46	42	12
Average debt at graduation	dollars	5,500	14,900	33,900
Without debt two years after graduation	percent	30	15	F
Reported difficulties repaying debt	percent	17	34	59
Average debt at graduation for those who still owe two years after graduation	dollars	6,000	15,000	34,000
Average debt at graduation for those without debt two years after graduation	dollars	4,300	14,400	32,200
Average remaining debt two years after graduation for those who still owe	dollars	4,300	11,600	27,800
Employed in 2007	percent	89	92	88
Without income in 2006	percent	F	F	x
Average amount paid in 2006	dollars	1,100	1,800	2,800
Average income in 2006	dollars	29,700	30,100	35,000
Ratio of debt payments to income	ratio	4	6	9
Debt servicing ratio – 25th percentile	ratio	2	3	F
Debt servicing ratio – Median	ratio	3	6	6
Debt servicing ratio – 75th percentile	ratio	6	9	14
Average age at graduation	years	25	27	29
Median age at graduation	years	23	25	27
Married or living common-law	percent	39	38	43
With dependent children	percent	23	34	40
With previous postsecondary education	percent	48	54	72
Bachelor				
Number of graduates	**number**	**11,100**	**15,600**	**12,400**
Percentage of graduates with debt	percent	28	40	32
Average debt at graduation	dollars	5,300	16,100	36,600
Without debt two years after graduation	percent	53	24	15
Reported difficulties repaying debt	percent	12	22	43
Average debt at graduation for those who still owe two years after graduation	dollars	5,600	16,300	37,000
Average debt at graduation for those without debt two years after graduation	dollars	5,000	15,300	34,500
Average remaining debt two years after graduation for those who still owe	dollars	3,800	12,000	28,800
Employed in 2007	percent	91	90	92
Without income in 2006	percent	F	F	x
Average amount paid in 2006	dollars	1,100	2,500	4,300
Average income in 2006	dollars	40,000	38,200	41,500
Ratio of debt payments to income	ratio	3	7	11
Debt servicing ratio – 25th percentile	ratio	2	4	5
Debt servicing ratio – Median	ratio	3	6	10
Debt servicing ratio – 75th percentile	ratio	5	10	15
Average age at graduation	years	26	26	27
Median age at graduation	years	24	24	25
Married or living common-law	percent	42	43	38
With dependent children	percent	18	19	21
With previous postsecondary education	percent	62	62	55

Table A.9 (concluded)

Profile of 2005 graduates who owed money to government student loans at graduation, by level of study and size of debt

		Small	Medium	Large
		Less than $10,000	$10,000 to $24,999	$25,000 and over
Master				
Number of graduates	**number**	**2,300**	**3,700**	**2,200**
Percentage of graduates with debt	percent	28	45	27
Average debt at graduation	dollars	5,600	15,800	37,500
Without debt two years after graduation	percent	49	31	20
Reported difficulties repaying debt	percent	8 !	22	41
Average debt at graduation for those who still owe two years after graduation	dollars	6,000	16,100	38,300
Average debt at graduation for those without debt two years after graduation	dollars	5,100	15,100	34,300
Average remaining debt two years after graduation for those who still owe	dollars	4,000	11,400	29,900
Employed in 2007	percent	94	91	92
Without income in 2006	percent	x	F	F
Average amount paid in 2006	dollars	1,200	2,400	4,500
Average income in 2006	dollars	47,700	46,400	46,600
Ratio of debt payments to income	ratio	3	5	10
Debt servicing ratio – 25th percentile	ratio	2	3	4 !
Debt servicing ratio – Median	ratio	3	5	9
Debt servicing ratio – 75th percentile	ratio	4	7	13
Average age at graduation	years	29	29	30
Median age at graduation	years	27	27	28
Married or living common-law	percent	58	56	54
With dependent children	percent	29	28	28
With previous postsecondary education	percent	97	99	96
Doctorate				
Number of graduates	**number**	**200**	**500**	**400**
Percentage of graduates with debt	percent	21	43	35
Average debt at graduation	dollars	6,000	16,200	41,200
Without debt two years after graduation	percent	49	29	21
Reported difficulties repaying debt	percent	12	22	36
Average debt at graduation for those who still owe two years after graduation	dollars	6,200	16,500	42,200
Average debt at graduation for those without debt two years after graduation	dollars	5,800	15,300	37,300
Average remaining debt two years after graduation for those who still owe	dollars	4,200	12,500	33,400
Employed in 2007	percent	92	91	91
Without income in 2006	percent	x	x	x
Average amount paid in 2006	dollars	1,200	2,600	5,300
Average income in 2006	dollars	52,400	55,300	56,200
Ratio of debt payments to income	ratio	2	5	9
Debt servicing ratio – 25th percentile	ratio	1	3	4
Debt servicing ratio – Median	ratio	2	4	7
Debt servicing ratio – 75th percentile	ratio	3	7	11
Average age at graduation	years	33	34	35
Median age at graduation	years	32	32	33
Married or living common-law	percent	74	72	70
With dependent children	percent	49	50	42
With previous postsecondary education	percent	100	100	100

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Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.10

Profile of debt to government student loan programs for 2005 graduates, by level of study and field of study (major fields and selected minor fields)

			Debt profile of graduates who owed at graduation				
	Total number of graduates	Debt owing at graduation	Average owed at graduation	Without debt two years after graduation	Reporting difficulties repaying debt	Large debt at graduation – $25,000 and over	Average remaining debt for those who still owed years after graduation
	number	percent	dollars	percent	percent	percent	dollars
College							
Total	**71,800**	**34**	**12,800**	**21**	**29**	**12**	**10,900**
Education	2,100	28	11,400	25	24	10 E	9,800 E
Visual and performing arts, and communications technologies	5,000	39	13,800	16 E	41	12 E	11,400
Humanities	700	36 E	20,600	F	F	47 E	18,600 E
Social and behavioural sciences, and law	7,700	35	13,500	14 E	39	11 E	11,600
Communications, journalism, and related programs	1,900	41	16,600	F	51	F	14,700
Legal professions and studies	1,000	37 E	15,500	F	58 E	x	14,500
Business, management and public administration	17,600	31	11,900	23 E	30	11 E	10,600
Physical and life sciences, and technologies	700	48	11,300	31	19	10 E	10,000
Mathematics, computer and information sciences	3,600	36	12,800	23	19	15 E	11,300
Computer and information sciences and support services and related interdisciplinary fields	3,300	36	12,200	24	18	14 E	10,600
Architecture, engineering and related technologies	12,100	34	11,300	28	25	9 E	9,300
Engineering technologies / Technicians	6,800	37	12,200	32	26 E	13 E	11,200
Mechanic and repair technologies / Technicians	2,700	39	10,400	29 E	24 E	x	7,000
Agriculture, natural resources and conservation	1,700	37	12,000	23	24	12 E	9,800
Agriculture, agricultural operations, and related sciences	900	34	10,000	22 E	17 E	F	7,900
Natural resources and conservation	800	41	13,900	23 E	30	18 E	11,600
Health, parks, recreation and fitness	15,100	37	14,500	21	26	15 E	12,300
Nursing	4,700	49	16,800	17 E	26 E	18 E	13,200
Other health professions and related clinical sciences	9,600	30	12,500	24 E	23 E	13 E	11,100 E
Personal, protective and transportation services	5,100	29	11,600	13 E	24 E	8 E	8,600
Personal and culinary services	1,300	34	12,200	8 E	23 E	F	9,100
Security and protective services	3,500	28	10,700	15 E	25 E	F	7,900
Bachelor							
Total	**94,800**	**43**	**19,500**	**30**	**26**	**32**	**16,900**
Education	16,400	45	20,800	27	27	35	18,700
Visual and performing arts, and communications technologies	4,000	44	19,000	22	43	32	15,700
Humanities	7,100	44	19,800	22 E	47	37	18,200
Social and behavioural sciences, and law	16,600	43	19,700	22 E	29	33	17,800
Social sciences and related interdisciplinary fields	8,000	42	18,400	20 E	35 E	28 E	16,800
Psychology and related interdisciplinary fields	3,000	47	21,500	F	20 E	39 E	18,100
Legal professions and studies	1,900	60	23,800	F	F	48 E	23,200 E
Business, management and public administration	18,700	36	15,800	29	23	21	14,400
Physical and life sciences, and technologies	3,600	42	17,400	29	23 E	25	14,800
Mathematics, computer and information sciences	4,900	41	19,600	42	24	34	17,300
Mathematics and statistics and related interdisciplinary fields	800	32 E	21,900 E	61 E	38 E	41 E	26,000 E
Computer and information sciences and support services and related interdisciplinary fields	4,200	42	19,300	39	22 E	33	16,500
Architecture, engineering and related technologies	8,800	44	18,100	39	17 E	28	15,100
Architecture and related services and related Interdisciplinary studies	300 E	54 E	20,700 E	x	x	x	F
Engineering	7,800	43	18,200	39	17 E	27	14,800
Agriculture, natural resources and conservation	1,400	46	16,300	33	17	28	13,000
Agriculture, agricultural operations, and related sciences	600	48	15,700	29	14 E	26 E	12,200
Natural resources and conservation	800	45	16,800	36	19 E	29	13,600
Health, parks, recreation and fitness	11,900	52	23,600	38	16	39	17,900
Medicine	800 E	77	26,800	62	F	38 E	23,800
Nursing	5,200	45	21,100	33	18 E	38	19,300
Other health professions and related clinical sciences	3,900	58	25,500	38	12 E	43	15,500
Parks, recreation, leisure and fitness studies	1,900	45	17,800	31 E	F	F	15,600
Personal, protective and transportation services	600	32	17,300	20 E	29 E	30 E	14,600

Table A.10 (concluded)

Profile of debt to government student loan programs for 2005 graduates, by level of study and field of study (major fields and selected minor fields)

	Total number of graduates	Debt owing at graduation	Debt profile of graduates who owed at graduation				Average remaining debt for those who still owed years after graduation
			Average owed at graduation	Without debt two years after graduation	Reporting difficulties repaying debt	Large debt at graduation – $25,000 and over	
	number	percent	dollars	percent	percent	percent	dollars
Master							
Total	**24,800**	**34**	**18,800**	**33**	**23**	**27**	**15,800**
Education	3,600	22	19,200	35	30 E	31 E	15,100
Visual and performing arts, and communications technologies	500	51	19,300	21 E	45	30	17,800
Humanities	1,600	38	20,500	29 E	32 E	30 E	19,600
Social and behavioural sciences, and law	2,900	45	19,200	22 E	21 E	28	15,500
Business, management and public administration	7,400	25	17,400	33	19 E	25 E	14,500
Physical and life sciences, and technologies	1,200	36	16,000	35	19 E	24	13,000
Mathematics, computer and information sciences	1,400	43	20,100	32	27	30	16,300
Mathematics and statistics and related interdisciplinary fields	200	25 E	18,400	x	x	x	12,600 E
Computer and information sciences and support services and related interdisciplinary fields	900	46	20,200	37	25 E	28	16,300
Library science	400	42	20,400	23 E	34 E	32 E	17,400
Architecture, engineering and related technologies	3,000	41	19,600	44	25	26	18,000
Architecture and related services and related interdisciplinary studies	600	60	24,400	22 E	23 E	30 E	20,900
Engineering	2,300	37	17,700	52	26	24 E	16,300
Agriculture, natural resources and conservation	600	46	18,600	33	25	26	15,800
Agriculture, agricultural operations, and related sciences	200	42	18,600	39 E	17 E	27 E	13,900
Natural resources and conservation	400	48	18,700	31	28	25	16,500
Health, parks, recreation and fitness	2,200	45	19,200	35	15 E	25	14,600
Other health professions and related clinical sciences	1,600	50	19,400	29	12 E	24	14,700
Parks, recreation, leisure and fitness studies	200	51	12,900	40 E	x	x	12,600 E
Personal, protective and transportation services	100	23	19,200	47 E	x	x	14,700
Doctorate							
Total	**3,200**	**34**	**22,900**	**30**	**25**	**35**	**19,700**
Education	300	21	23,000	36	32	34	16,900
Visual and performing arts, and communications technologies	100	41	24,500	30 E	x	45	23,500
Humanities	300	44	24,500	22	38	38	20,600
Social and behavioural sciences, and law	700	48	25,300	30	23	41	21,900
Business, management and public administration	100	29	17,900	28 E	32 E	x	15,200
Physical and life sciences, and technologies	800	32	19,200	35	20	29	17,200
Mathematics, computer and information sciences	200	26	24,000	23 E	x	36	19,800 E
Architecture, engineering and related technologies	400	23	19,800	38	18	28	16,500
Engineering	400	22	20,200	40	19	26	16,900
Agriculture, natural resources and conservation	100	32	21,900	x	41	32	17,300
Health, parks, recreation and fitness	300	29	23,400	32	21	41	19,000
Other health professions and related clinical sciences	200	27	19,500	33	x	33	15,400
Personal, protective and transportation services	x	x	x	x	x	x	x

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F too unreliable to be published

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

The sum of graduates by major field of study may not add up to the total number of graduates due to the fact that the field of study could not be coded for some graduates.

Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.11

Average government student debt remaining, employment status and ratio of remaining government student debt to earnings, for 2005 graduates two years after graduation, by level of study and field of study (major fields and selected minor fields)

	Employed	Average government student debt remaining two years after graduation for those who still owed and were employed in 2007	Average earnings of those who still owed and were employed in 2007	Remaining debt to earnings ratio	Not employed	Average government student debt remaining two years after graduation for those who still owed and were not employed in 2007
	percent	dollars	dollars	ratio	percent	dollars
College						
Total	**90**	**10,800**	**35,200**	**31**	**10**	**11,600**
Education	85	7,800	28,100	28	15 E	F
Visual and performing arts, and communications technologies	89	11,400	28,600	40	11 E	12,400
Humanities	88	19,900 E	34,100 E	F	F	9,500 E
Social and behavioural sciences, and law	91	11,900	29,100	41	9 E	9,900 E
Communications, journalism, and related programs	90	14,700	33,200	44 E	F	15,000 E
Legal professions and studies	89	16,100	30,800	52 E	x	x
Business, management and public administration	89	10,400	34,200	30	11 E	12,200 E
Physical and life sciences, and technologies	86	9,000	35,300	26	14 E	15,400
Mathematics, computer and information sciences	88	11,400	35,700	32	12 E	11,400
Computer and information sciences and support services and related interdisciplinary fields	87	10,600	36,800	29	13 E	11,400
Architecture, engineering and related technologies	91	9,200	44,100	21	9 E	10,700 E
Engineering technologies / Technicians	93	10,800	45,500	24	F	15,500 E
Mechanic and repair technologies / Technicians	85	7,200	43,900	16	F	6,700
Agriculture, natural resources and conservation	92	9,700	35,900	27	8 E	13,500
Agriculture, agricultural operations, and related sciences	95	7,800	29,800	26	x	x
Natural resources and conservation	89	11,400	41,500	28	11 E	13,200
Health, parks, recreation and fitness	93	12,200	36,900	33	F	12,100
Nursing	96	12,800	38,500	33	F	15,700 E
Other health professions and related clinical sciences	92	11,100 E	36,200	31 E	F	11,000 E
Personal, protective and transportation services	91	8,700	32,100	27	F	7,500
Personal and culinary services	90	9,000	26,300	34 E	F	10,000
Security and protective services	91	8,100	34,700	23	F	5,700 E
Bachelor						
Total	**91**	**16,900**	**44,800**	**38**	**9**	**17,300**
Education	89	19,100	40,700	47	11	14,800
Visual and performing arts, and communications technologies	90	15,300	29,500	52	10 E	18,900
Humanities	84	17,400	33,000	53	16 E	21,800
Social and behavioural sciences, and law	90	18,200	42,300	43	10 E	14,300 E
Social sciences and related interdisciplinary fields	87	17,500	37,700	46	F	12,700 E
Psychology and related interdisciplinary fields	97	18,300 E	36,700	50 E	F	22,300
Legal professions and studies	97	23,500 E	69,100	34 E	x	x
Business, management and public administration	92	14,100	44,200	32	F	18,900 E
Physical and life sciences, and technologies	87	14,500	37,800	38	F	16,700
Mathematics, computer and information sciences	87	16,000	46,000	35	13 E	27,200 E
Mathematics and statistics and related Interdisciplinary fields	98	26,100 E	42,100	62 E	x	x
Computer and information sciences and support services and related interdisciplinary fields	87	14,900	46,300	32	13 E	27,300 E
Architecture, engineering and related technologies	96	15,400	58,300	26	F	16,300 E
Architecture and related services and related interdisciplinary studies	72 E	F	32,600 E	F	x	x
Engineering	97	15,100	59,400	25	F	13,400
Agriculture, natural resources and conservation	97	12,400	44,200	28	F	30,900 E
Agriculture, agricultural operations, and related sciences	96	12,300	41,500	30	x	x
Natural resources and conservation	97	12,400	46,200	27	x	x
Health, parks, recreation and fitness	94	18,000	60,800	30	6 E	14,500
Medicine	80	25,800	61,500 E	42 E	x	x
Nursing	99	19,200	53,800	36	x	x
Other health professions and related clinical sciences	96	15,400	73,800	21	F	12,100
Parks, recreation, leisure and fitness studies	81	15,800	40,300	39 E	F	13,400 E
Personal, protective and transportation services	91	14,500	42,000	35	F	15,000

Table A.11 (concluded)

Average government student debt remaining, employment status and ratio of remaining government student debt to earnings, for 2005 graduates two years after graduation, by level of study and field of study (major fields and selected minor fields)

	Employed	Average government student debt remaining two years after graduation for those who still owed and were employed in 2007	Average earnings of those who still owed and were employed in 2007	Remaining debt to earnings ratio	Not employed	Average government student debt remaining two years after graduation for those who still owed and were not employed in 2007
	percent	dollars	dollars	ratio	percent	dollars
Master						
Total	**90**	**15,300**	**50,000**	**31**	**10** [E]	**18,400** [E]
Education	93	15,100	45,100	33 [E]	F	F
Visual and performing arts, and communications technologies	85	18,400	32,200	57	15 [E]	15,100
Humanities	87	18,500	40,200	46 [E]	13 [E]	26,700 [E]
Social and behavioural sciences, and law	78	16,800	45,300	37	F	12,100 [E]
Business, management and public administration	94	12,100	54,200	22	F	F
Physical and life sciences, and technologies	90	13,200	50,900	26	10 [E]	12,500
Mathematics, computer and information sciences	93	15,400	49,000	31	F	28,900
Mathematics and statistics and related interdisciplinary fields	100	12,600 [E]	45,300	28 [E]	0	...
Computer and information sciences and support services						
ng related interdisciplinary fields	93	14,700	50,400	29	x	x
Library science	92	18,000	47,000	38	x	x
Architecture, engineering and related technologies	89	18,500	50,800	37	F	13,100 [E]
Architecture and related services and related interdisciplinary studies	87	21,700	46,500	47	x	x
Engineering	92	16,400	53,600	31	x	x
Agriculture, natural resources and conservation	96	15,800	47,800	33	x	x
Agriculture, agricultural operations, and related sciences	100	13,900	48,600	29	0	...
Natural resources and conservation	95	16,500	47,500	35	x	x
Health, parks, recreation and fitness	95	14,700	62,300	24	F	12,100
Other health professions and related clinical sciences	96	14,700	64,300	23 [E]	x	x
Parks, recreation, leisure and fitness studies	79	13,600 [E]	46,600	29 [E]	x	x
Personal, protective and transportation services	86	14,200	57,600	25	x	x
Doctorate						
Total	**90**	**19,500**	**61,800**	**32**	**10**	**19,900**
Education	78	14,800	66,800	22	22 [E]	18,000
Visual and performing arts, and communications technologies	81	24,800	60,800	41	x	x
Humanities	82	19,100	51,900	37	18 [E]	24,400
Social and behavioural sciences, and law	91	21,400	63,600	34	9	26,000
Business, management and public administration	100	15,900	79,600	20	0	...
Physical and life sciences, and technologies	93	17,400	56,200	31	7 [E]	14,700
Mathematics, computer and information sciences	95	21,900 [E]	66,700	33 [E]	x	x
Architecture, engineering and related technologies	95	16,900	68,400	25	x	x
Engineering	95	17,400	70,800	25	x	x
Agriculture, natural resources and conservation	95	17,800	54,700	33	x	x
Health, parks, recreation and fitness	88	20,600	73,500	28	x	x
Other health professions and related clinical sciences	81	17,300	80,200	22	x	x

... not applicable

0 true zero or a value rounded to zero

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E use with caution

F too unreliable to be published

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table, as are graduates for whom a l abour force status could not be calculated.

The major field of study "Personal, protective and transportation services" for doctorate graduates is omitted from this table because none of the doctorate graduates in that field still had a government student loan two years after graduation.

Averages are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.12

Labour force activity in 2007 of 2005 graduates of co-op versus non co-op programs, by level of study

		Co-op programs	Non co-op programs
College			
Number of graduates	number	18,300	53,300
Employed	percent	90	90
Employed full-time	percent	81	80
Employed part-time	percent	9	11
Out of the labour force	percent	4 [E]	4
Unemployment rate	percent	6 [E]	6
Bachelor			
Number of graduates	number	12,200	82,500
Employed	percent	93	90
Employed full-time	percent	90	83
Employed part-time	percent	3 [E]	7
Out of the labour force	percent	4 [E]	4
Unemployment rate	percent	3 [E]	6

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table, as are graduates for whom a labour force status could not be calculated.

Graduates who did not report their hours of work were excluded from the denominator in the calculation of full-time and part-time employment rates.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

Numbers of graduates are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.13

Estimated gross annual earnings for 2005 graduates working full-time in 2007, for graduates of co-op versus non co-op programs, by level of study

	Co-op programs	Non co-op programs
	dollars	dollars
College		
25th percentile	28,500	27,000
Median	35,600	34,800
75th percentile	45,000	44,200
Bachelor		
25th percentile	41,000	35,000
Median	49,000	44,100
75th percentile	57,000	55,000

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

All numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.14

Student debt from all sources for 2005 graduates of co-op versus non co-op programs, by level of study

		College co-op programs	College non co-op programs	Bachelor co-op programs	Bachelor non co-op programs
Number of graduates	number	18,300	53,300	12,200	82,500
Percentage of graduates who owed student debt to any source	percent	45	46	55	54
Average debt owed to all sources at time of graduation	dollars	14,400	13,200	21,200	23,000
Percentage of graduates with debt who had paid it off two years after graduation	percent	22	24	36	27
Average debt remaining two years after graduation for those who still owed	dollars	13,100	11,400	20,700	20,400

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.

Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.15

Labour force activity in 2007 for 2005 graduates, by whether or not a component of the program was taken outside of Canada and by level of study

		Component of program taken outside of Canada	No component of program taken outside of Canada
Bachelor			
Number of graduates	number	4,000	90,900
Employed	percent	92	91
Employed full-time	percent	86	84
Employed part-time	percent	F	7
Out of the labour force	percent	4 [E]	4
Unemployment rate	percent	5 [E]	5
Master			
Number of graduates	number	800	24,000
Employed	percent	97	93
Employed full-time	percent	92	86
Employed part-time	percent	F	7
Out of the labour force	percent	x	3 [E]
Unemployment rate	percent	F	4
Doctorate			
Number of graduates	number	300	2,900
Employed	percent	89	91
Employed full-time	percent	80	84
Employed part-time	percent	8	7
Out of the labour force	percent	5	3
Unemployment rate	percent	6	6

x suppressed to meet the confidentiality requirements of the *Statistics Act*

[E] use with caution

F too unreliable to be published

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table, as are graduates for whom a l abour force status could not be calculated.

Graduates who did not report their hours of work were excluded from the denominator in the calculation of full-time and part-ti me employment rates.

The unemployment rate is the percentage unemployed out of the total of employed and unemployed.

Components outside of Canada include only those with a duration of at least four weeks.

Numbers of graduates are rounded to the nearest 100.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.16

Estimated gross annual earnings for 2005 graduates working full-time in 2007, by whether or not a component of the program was taken outside of Canada and by level of study

	Bachelor	Master	Doctorate
	dollars	dollars	dollars
Component of program taken outside of Canada			
25th percentile	32,800	49,100	48,000
Median	44,000	60,000	62,000
75th percentile	56,000	73,000	75,000
No component of program taken outside of Canada			
25th percentile	36,000	46,800	48,000
Median	45,000	60,000	65,000
75th percentile	55,000	78,000	79,600

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
Components outside of Canada include only those with a duration of at least four weeks.
All numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

Table A.17

Student debt from all sources for 2005 graduates, by whether or not a component of the program was taken outside of Canada and by level of study

		Component of program taken outside of Canada	No component of program taken outside of Canada
Bachelor			
Number of graduates	number	4,000	90,900
Percentage of graduates who owed student debt to any source	percent	57	54
Average debt owed to all sources at time of graduation	dollars	23,300	22,800
Percentage of graduates with debt who had paid it off two years after graduation	percent	34	28
Average debt remaining two years after graduation for those who still owed	dollars	21,800	20,300
Master			
Number of graduates	number	800	24,000
Percentage of graduates who owed student debt to any source	percent	62	46
Average debt owed to all sources at time of graduation	dollars	23,900	22,800
Percentage of graduates with debt who had paid it off two years after graduation	percent	42 [E]	32
Average debt remaining two years after graduation for those who still owed	dollars	19,700	19,500
Doctorate			
Number of graduates	number	300	2,900
Percentage of graduates who owed student debt to any source	percent	46	43
Average debt owed to all sources at time of graduation	dollars	27,400	25,400
Percentage of graduates with debt who had paid it off two years after graduation	percent	24	31
Average debt remaining two years after graduation for those who still owed	dollars	24,000	22,300

[E] use with caution

Note: Graduates who pursued further education after their 2005 graduation are excluded from this table.
Components outside of Canada include only those with a duration of at least four weeks.
Averages and numbers are rounded to the nearest 100, but analysis is carried out on unrounded values.

Source: Statistics Canada, National Graduates Survey (Class of 2005).

References

Allen, Mary and Vaillancourt, Chantal. 2004. Class of 2000: Profile of postsecondary graduates and student debt. Statistics Canada, Catalogue no. 81-595-MIE – No. 016.

Baum, Sandy and Schwartz, Saul. 2006. *How Much Debt is Too Much? Defining Benchmarks for Manageable Student Debt.* The College Board, New York.

Organization for Economic Cooperation and Development, Education at a Glance 2008. OECD Indicators, Table A1.3a.

Endnotes

1. OECD. Education at a Glance 2008. OECD Indicators. Table A1.3a.
2. This number represents the total number of graduates only from responding institutions to the NGS, which under-represents the total number of graduates in 2005. Data required to build the frame could not be obtained from a few institutions and therefore, graduates from those institutions were not included on the frame. Consequently, it is estimated that approximately 10,000 college graduates in Ontario and 5,000 college graduates in Alberta are missing from the NGS population. While the NGS also surveyed graduates from trade/vocational programs, results for these graduates are not reported in this paper.
3. Throughout this report, all references and comparisons to the previous cohort (graduating class of 2000) are drawn from the report entitled "Class of 2000: Profile of postsecondary graduates and student debt" (April 2004).
4. The proportion of bachelor graduates in Quebec with previous postsecondary studies remained stable. This is to be expected since the education system in Quebec requires that students complete a two-year college program as a prerequisite for university.
5. At the doctorate level it is difficult to draw comparisons, since many of the employment figures from 2002 had to be suppressed for confidentiality reasons.
6. The term 'earnings premium' refers to the increase in average (median) earnings from one level to the next; so in other words, master graduates earn on average 33% more than bachelor graduates.
7. For the majority of the text, it should be noted clearly that average debt refers to the particular graduate population that *owed* debt, as reported in the NGS.
8. Represents difference in the average debt owed only to non-government sources, 2007 constant dollars
9. Portraying the distribution across fields of study at the bachelor level and not the college, master, or doctorate level was arbitrarily chosen.
10. Debt-Free refers to graduates that were no longer repaying their government student loans two years after graduation.
11. As a note, the calculation of debt burden in this report may not actually indicate debt management per se. In some cases, minimum payments on outstanding debt constitute a high proportion of income. In other cases, individuals may pay more than the monthly payment or provide lump sums to pay down their debt faster.
12. See Baum and Schwartz (2006) for a detailed discussion on the concept of debt-service ratios, debt manageability and historical rationale for the use of a benchmark.

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Cumulative index

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